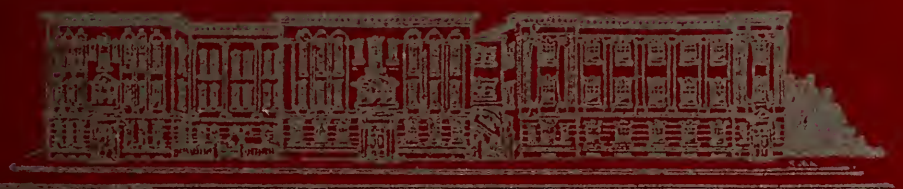


NEW BEDFORD

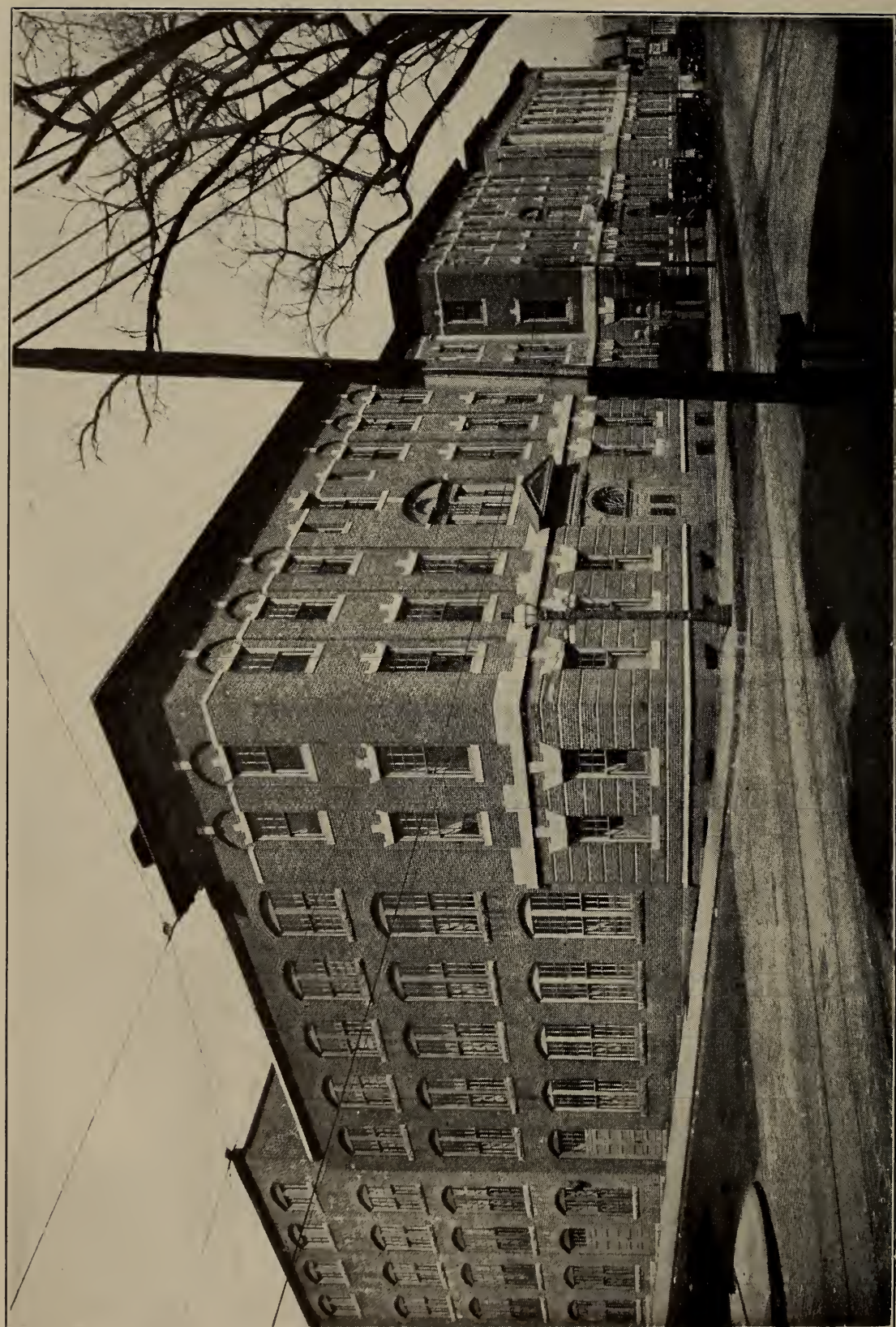
TEXTILE INSTITUTE



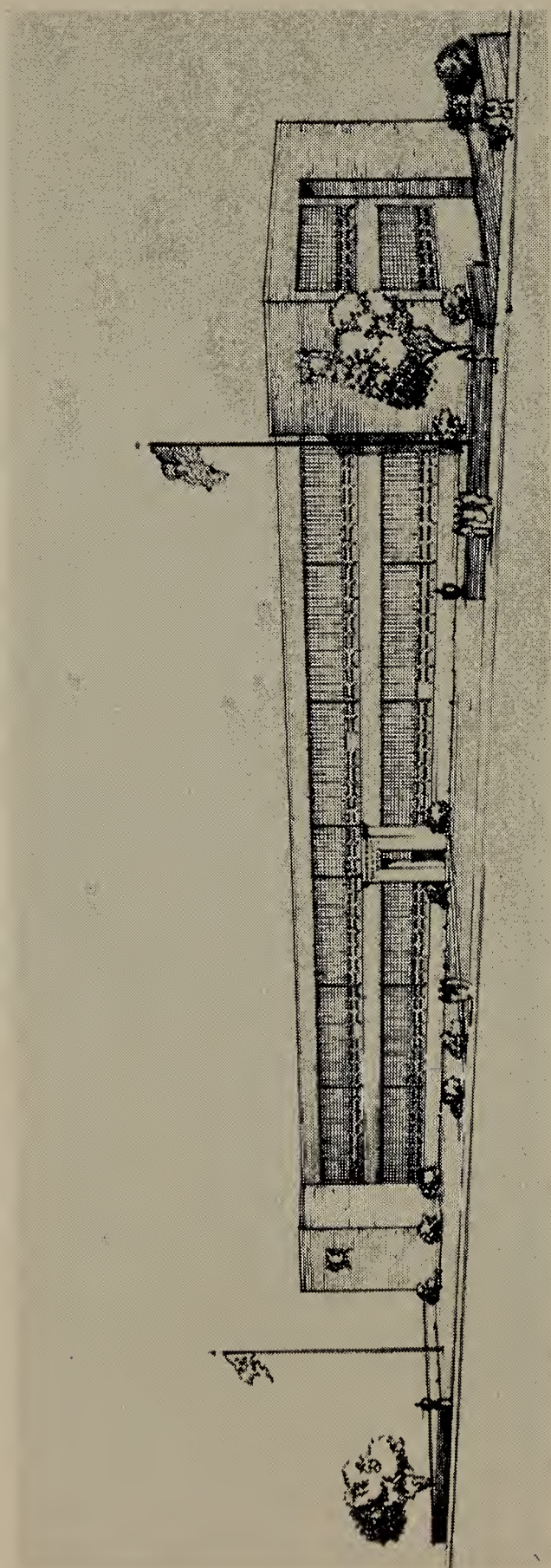
CATALOGUE

1951-1953

NEW BEDFORD, MASSACHUSETTS



Proposed Addition



New Bedford Textile Institute

A College of Textiles and Engineering

New Bedford, Massachusetts

Bachelor of Science

Textile Engineering

Textile Chemistry

Machine Design

Catalogue

1951-1953

FOREWORD

The purpose of this issue of the Catalogue is to provide information for prospective students, or anyone else who may be interested, regarding the history, traditions, objectives, resources, programs, equipment and staff of the Institute.

Administration and Staff



Entrance

Board of Trustees

Administrative Officers

Instruction Staff

NEW BEDFORD TEXTILE INSTITUTE

OFFICERS OF THE BOARD OF TRUSTEES

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Ex-officio, W. KENNETH BURKE, *Superintendent of Schools*, 166 William St.
Tel. 7-9348. Home: 37 Hill St. Tel. 3-1210

Term Expires 1951

NILS V. NELSON, 8 Temple Ave., Winthrop, Mass. Tel. Ocean 3-2630. Office, N. V. Nelson Co., Cotton, 93 Federal St., Boston, Mass. Tel. Lib. 2-7917. Summer home: Osterville, Mass. Osterville 857

JOHN A. SHEA, 384 Washington St., Taunton, Mass. Taunton 4-8746. Summer home: Cataumet. Cataumet 632-R

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Berkshire Fine Spinning, Inc., King Phillip A Division, 941 Grinnell St., Fall
River, Mass. Tel. Fall River 6-8231

JOSEPH DAWSON, JR., 15 Elm St., South Dartmouth, Mass. Tel. 6-8332
Knowles Loom Reed Works. Tel. 2-6204

MISS E. FERRIS ALMADA, 6 Ocean St., New Bedford, Mass. Tel. 2-7738
Gosnold Mils, Inc. Tel. 7-9406

Term Expires 1952

JOHN VERTENTE, JR., 67 Mechanics Lane, New Bedford, Mass. Tel. 2-5590
Office: Tel. 2-2002

WILLIAM RICHARDS, 519 North Front St. Tel. 4-2234. Office:

LAURENT FAUTEUX, 241 State St., New Bedford, Mass. Tel. 3-7751. Office:
Tel. 7-9367

DENNIS J. MURPHY, Exchange St., Millis, Mass. Tel. -246

RAYMOND R. MCEVOY, 156 Porter St., Stoughton, Mass. Tel. Stoughton 78
U. S. Civil Service Commission, Office of Director, Federal Building, Room
1040, Boston, Mass. Tel. Lib. 2-5600

Term Expires 1953

GUSTAVE LAMARCHE, 175 Phillips Ave., New Bedford, Mass. Tel. 3-2485
Wamsutta Mills. Tel. 7-9301

EDWARD L. MURPHY, JR., 84 Tenney Rd., So. Braintree, Mass. Tel. 228-81-W

MRS. IDA D. EPSTEIN, 8 Hawthorn Terrace, New Bedford, Mass. Tel. 3-3425

WILLIAM E. KING, *District Supervisor, Department of Education, 84 Court St.,*
New Bedford, Mass. Office: Tel. 3-6256

JAMES B. MONIZ, 59 Capitol St. Tel. 8-5378

ADMINISTRATION

JOHN A. SHEA, *President, Board of Trustees*
, Vice-President, Board of Trustees

GEORGE WALKER, *President of Institute*

MARY F. MAKIN, *Treasurer and Principal Clerk*

CECELIA ZEITLER, *Senior Clerk*

LORETTA B. LAVOIE, *Junior Clerk and Typist*

ESTELLE M. DOWD, *Junior Clerk and Typist*

ANNE MAHONEY, *Junior Clerk and Typist*

LOUIS E. F. FÉNAUX, *Acting Librarian*

JOHN E. FOSTER, *Acting Registrar*

LEO M. SULLIVAN, *In Charge of Bookstore*

DEPARTMENTS OF INSTRUCTION

Department of Chemistry, Dyeing and Finishing

FRANCIS TRIPP, B.S. in Ch.E., M.S., Ch.E.

Professor of Chemistry and Head of Department

JOHN C. BROADMEADOW, B.S. in Ch.E.

Associate Professor of Chemistry

EDMUND J. DUPRE, B.S. in Textile Chemistry

Associate Professor of Chemistry

LOUIS E. F. FENAUX, B.S. in Chemistry, M.S. in Chemistry

Associate Professor of Chemistry

FERDINAND P. FIOCCHI, B.S.

Instructor in Chemistry

DEPARTMENT OF ENGINEERING

JOHN E. FOSTER, B.S. in C.E.

Professor of Machine Design and Head of Department

Division of Machine Design

ADAM BAYREUTHER

Assistant Professor of Tool Manufacturing

JOHN R. BARYLSKI

Instructor in Engineering Drawing

LOUIS E. F. FENAUX, B.S., M.S.

Instructor in Metallurgy

HOWARD C. TINKHAM, M.E.

Instructor in Mechanics

Division of Mathematics and Physics

DAVID W. SALTUS, B.S., M.A.

Instructor in Mathematics and Physics

LAWRENCE SYLVIA, B.S. in Physics

Instructor in Mathematics and Physics

HOWARD C. TINKHAM, M.E.

Instructor in Mathematics and Physics

Division of Humanities

AUGUSTUS SILVA, B.A., M.A.

Instructor in English

LEO M. SULLIVAN, B.S., M.A.

Instructor in Social Sciences

DEPARTMENT OF TEXTILE ENGINEERING

Division of Cotton Yarn Preparation

FRANK HOLDEN

Associate Professor and Division Head

LOUIS PACHECO, JR., B.S. in T.E.

Assistant Professor of Carding and Spinning

WILLIAM S. KIRK

Instructor in Carding and Spinning

Division of Designing and Cloth Analysis

JAMES L. GIBLIN

Associate Professor and Division Head

ANTONE RODIL

Assistant Professor of Designing

NANCY ALLEN, B.F.A.

Instructor in Creative Design

JOHN REGAN, B.A.

Instructor in Designing

Division of Knitting

EDWARD H. CLOUTIER

Associate Professor and Division Head

Division of Textile Testing

JAMES L. GIBLIN

Associate Professor and Division Head

CLIFFORD N. BECK

Instructor in Microscopy and Textile Testing

Division of Weaving

FRED BEARDSWORTH

Associate Professor and Division Head

ANTONE RODIL

Assistant Professor of Weaving

RICHARD MOLYNAUX

Instructor in Weaving

JOHN REGAN, B.A.

Instructor in Weaving

FACULTY COMMITTEES

Committee on Education

JOHN E. FOSTER, *Chairman*
 FRED BEARDSWORTH
 LOUIS E. F. FENAUX
 JAMES L. GIBLIN
 AUGUSTUS SILVA

Committee on Admissions

FRANCIS TRIPP, *Chairman*
 JOHN E. FOSTER
 FRANK HOLDEN
 LEO M. SULLIVAN
 EDMUND DUPRE

Committee on Control

JAMES L. GIBLIN, *Chairman*
 ADAM BAYREUTHER
 JOHN BROADMEADOW
 EDWARD H. CLOUTIER
 DAVID SALTUS

Athletic Association

FRANCIS TRIPP, *President*
 JAMES L. GIBLIN, *Secretary*
 LOUIS E. F. FENAUX, *Treasurer*
 FRED BEARDSWORTH
 JOSEPH DAWSON, *Trustee Member*
 PHILIP MANCHESTER, *Trustee Member*
 DAVID SALTUS
 GEORGE WALKER, *President of New Bedford Textile Institute*

COACHES

FRED BEARDSWORTH, *Soccer Coach*
 CLARENCE "CLARRY" HASKELL, *Baseball and Football Coach*
 FRANCIS TRIPP, *Basketball Coach*

General Information



History

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NEW BEDFORD TEXTILE INSTITUTE

1898-1951

The New Bedford Textile Institute was established and incorporated by the Board of Trustees of the New Bedford Textile School on August 1, 1895, under Chapter 475 of the Acts of 1895 of the Commonwealth of Massachusetts.

The first meeting of the Board of Trustees was held on January 27, 1896 and committees were appointed to supervise activities with relation to building, finance, machinery, education and other necessary executive functions. During the year 1897 the city of New Bedford appropriated \$25,000 for the use of the school and the Commonwealth of Massachusetts appropriated an additional \$25,000 the following year. With these funds the first of the present five buildings was constructed.

The first building, consisting of three stories and a basement, comprised about 22,000 square feet of floor space. During the first 25 years of the school's existence, four buildings were added; three in the form of additions and one, the recitation building, a separate structure, was connected to the others by an overpass and tunnel.

The present Institute has approximately 110,000 square feet of floor space. It is one of the most modern and best-equipped textile institutes in the world.

The first course offered by the Institute was entitled, "General Cotton Course." In 1902, two additional courses in Knitting and Chemistry were offered. A mechanical engineering department was added in 1905. This department offered courses in mechanical drawing, machine shop practice, shop mathematics, mechanics, electricity and steam. These courses at first were offered only in conjunction with the general cotton course. Later, a separate course in Junior Mechanical Engineering was offered and it was from this beginning that the present engineering department evolved.

Today the following courses of study are offered:

Degree Courses — 4 years

Bachelor of Science in Textile Engineering
Bachelor of Science in Textile Chemistry
Bachelor of Science in Machine Design

Diploma Courses — 3 years

General Textile Manufacturing
Textile Designing
Chemistry, Dyeing and Finishing
Knit Goods Manufacturing

Certificate Courses — 2 years

Textile Technology
Drafting and Machine Shop Practice

Along with the development and expansion of the curricula, there has been an almost complete renewal of equipment and a modernization of working facilities, i.e., laboratories, lighting, etc. It is estimated that during the past ten years approximately 450,000 dollars have been spent for new equipment and modernization.

At the present time, extensive additions to the school plant are being planned. The Commonwealth of Massachusetts has recently appropriated funds toward the purchase of considerable property adjoining the institute. Engineers are now working on tentative plans for a large addition which will house more laboratories and a modern library.

The New Bedford Textile Institute is proud of its professional standing and of the recognition it receives throughout the world. This recognition is evidenced by the large number of foreign students who attend each year. The current enrollment consists of students from approximately fifteen states and twelve foreign countries. Among the latter are France, Palestine, Chile, Bolivia, Mexico, Canada, China, Haiti, Egypt, Brazil and Greece.

ENVIRONMENT

The Institute is situated in the city of New Bedford, Massachusetts. It is located along the main bus line; both the bus terminal and railroad station are within walking distance.

New Bedford, being an industrial city is an especially suitable location for a school of this type. For many years it has been recognized as the world's largest manufacturer of fine cotton yarns and fancy fabrics. In recent years the industry of this city has become more diversified. Many new industries have found New Bedford, with its skilled manpower, particularly suited to their type of work. These industries include the world's largest manufacturers of electronic equipment along with an important manufacturer of condensers. One of the world's most important manufacturers of rubber equipment has long been established here and more recently a leading manufacturer of machine tools has migrated to this industrial city.

Textile, machine tool and rubber manufacturing or processing do not constitute the whole of New Bedford's diversified industry. This historical city has long been recognized as a leading fishing port. Each year, millions of dollars worth of fish are brought into this port, either for direct shipment or for New Bedford's large fish processing houses.

These industries, both old and new, afford the Institute many opportunities for planned inspection trips. This, we feel, is an invaluable aid in acquainting the student with the practical phases of his academic work.

Students wishing to remain in New Bedford during the summer recess will find many opportunities to work during this period. Because of the nature of the city's industry, the student often finds work which is in his chosen field, thereby gaining practical experience as well as financial aid to meet the expenses incurred during the school year.

The civic center of New Bedford is a few minutes walk from the school grounds. Here the student will find the municipal building, the main library, veterans administration building and many other city and county buildings. Close to the civic center he will find the city's largest shopping and theater district.

COLLEGE FACILITIES

Library

The institute maintains a main library and several small departmental libraries. The present main library contains approximately 4,000 volumes, all of which pertain, for the most part, to textile manufacturing, chemistry and general engineering. Present plans call for a library in the new addition to house a minimum of 15,000 volumes.

Each of the smaller departmental libraries contain volumes pertaining to the work of each particular department. Included among these are bound volumes of some twenty publications which are received monthly. These volumes make a very important reference for those students engaged in research.

The students also have access to the New Bedford Public Library. This library contains a very comprehensive collection of about 250,000 volumes. All courses offered at the institute require the student to make full use of all these facilities.

Bookstore

The institute maintains a bookstore on the second floor of the administration building. This store is operated on a non-profit basis. All supplies, books, etc., are sold at very little above cost — this difference covering the cost of maintaining the store.

The student will find all the supplies he needs in this bookstore. Although the student is not required to purchase these supplies, he is advised not to buy elsewhere until he is certain those things he will buy are approved by the person in charge of the course in which the equipment is to be used. All supplies in the bookstore are approved.

STUDENT ORGANIZATIONS

Student Council. This is a body consisting of elected representatives from each of the twelve classes, and one faculty representative. Its purpose is to study problems of the student body, class activities and the various matters of student

organizations. This body represents the student body in proposing changes or making recommendations to the college authorities.

Interfraternity Council. An organization consisting of members representing each of the men's and women's fraternities. One member is chosen from the faculty. This body determines the rushing season and the rules which control rushing. It has charge of enforcement of all institute rules regarding membership in fraternities.

Fraternities. There are three national, professional and social men's fraternities and one women's sorority. These are:

Phi Psi

Delta Kappa Phi

Sigma Tau Phi

The women's sorority is: Phi Zeta Sigma. These fraternities maintain chapter rooms and all play a major part in the social and athletic affairs of the institute.

Athletic Council. This is a body consisting of representatives of the Board of Trustees and representatives of the faculty. The purpose of this group is to determine all athletic policies. The athletic council determines the budgets for each sport and all schedules must meet their approval.

ADMISSIONS

Entrance Requirements for All Degree Courses

The Institute will accept for admission to the freshman class graduates of recognized high schools having 15 high school credits.

Degree Courses

Subjects required for entrance

1. Prescribed 7 units

English — 3 units

Algebra — 1 unit

Geometry — 1 unit

U. S. History — 1 unit

Lab. Science — 1 unit

2. Optional units

Mathematics — unlimited

Science — unlimited

Social Studies — not more than three

Foreign Language — not more than three

Other high school credits — varied and subject to evaluation by the faculty committee on admissions

Diploma and Certificate Courses

The number of students admitted to these courses will be limited according to the number of degree students admitted.

Requirements for entrance:

All applicants must have a high school diploma or its equivalent.

Subjects required for entrance will be determined by the courses to be taken.

All applicants must present with their application a certified transcript of their secondary school record.

Advanced Standing

Applicants will be admitted to advance standing if the following conditions are fulfilled:

The Faculty Committee on Admission must be satisfied that his secondary school record meets the entrance requirements of the institute.

He must present a certified transcript of the work completed at the previous college.

He must have completed all work required of those classes previous to the class in which he wishes to enter.

He must show that work completed at the previous institution is equivalent to that given at this institution.

A minimum of two years resident study must be completed at this institution in order for the applicant to receive a degree.

GRADUATION REQUIREMENTS

1. Requirements

The requirements for graduation are the satisfactory completion of all courses in one of the prescribed curricula of the Institute, a total of not less than 160 term credits, with not fewer than 160 honor points.

2. Grading System

The following grading system shall be used in determining the above:

- A. Excellent, 90-95
- B. Good, 80-90
- C. Passing, 70-79
- D. Passing without credit points, 60-69
- E. Failure, below 60
- Abs. Absent from examination
- Inc. Incomplete. Cannot be given unless student has average "C" on the course
- Wi. Withdrew officially from course
- "Dropped." Dropped without permission or after final date

3. Explanations

- a — A student absent from a final examination shall not be allowed to make up the examination until the instructor receives a notice from the Dean indicating that the absence was excused. An unexcused absence from examination becomes "Fa" on the students record.
- b — "Incomplete" indicates that the student has had an average of "C" or above, but has not completed the work specified for the course, has been allowed an extension of time by the instructor. The grade of "Incomplete" must be replaced by a regular grade the next time the course is given during the student's residence, or the "Incomplete" will become a "Failure" "Fi."
- c — A grade of "Fd" is posted if the instructor reports a student has dropped a course for which he was scheduled. The student may not have dropped the course officially or he may have dropped it after the final date for dropping courses.
- d — A "Failure" may be made up only by repeating the subject. Such a repeat course may be regularly scheduled on the students roster.

4. Credits and Averages

The Institute operates on the credit point system. Term credits represent the number of hours of work completed successfully; honor points are determined by the grade earned; (A) 3 honor points for each credit hour; (B) 2 honor points for each credit hour; (C) 1 honor point for each credit hour. In order to be graduated, each student is required to have a minimum number of honor points equal to the number of credit hours required for graduation in his curriculum.

- a — The scholastic average of each student is determined by the following formula:

$$\frac{(\text{Net honor points minus the number of hours failed}) 10}{\text{Credit hours earned plus the number of hours failed}} + 65$$

- b — Transfer credits and points are not included in scholastic averages.
- c — Grades of absent count as failures. Grades of incomplete do not count at all.
- d — The roster of the student's courses, duly approved, and copies filed with the Dean of the Institute, must contain every subject for which the student is allowed credit.
- e — No student may exceed a load of 24 hours without the approval of the Dean of the Institute, and no student may schedule less than 15 hours without the permission of the faculty committee. In computing student loads, non-credit courses are included.

5. Attendance Regulations

- a — *Absence*

- (1) Being absent from any ONE class shall constitute ONE absence.
- (2) After THREE absences from any one class, the Institute office shall

- be notified by the head of the department in which the absence occurred.
- (3) Any absence shall be considered an unexcused absence unless excused by the Dean.
 - (4) Each THREE unexcused absences from any one class shall automatically reduce the earned term mark for that subject, ONE grade. Example: An "A" will drop to a "B."
 - (5) Any recorded unexcused absence shall be corrected to an excused absence on the written order of the Dean.
 - (6) In case of an absence from any examination and/or quiz period, no student shall be permitted to take a makeup one without written permission of the Dean.
 - (7) When THREE UNEXCUSED ABSENCES are reported to the office, any student so reported shall be subject to such disciplinary action as is deemed necessary by the Dean.
 - (8) Only the Dean shall have authority to grant excuses.

b — *Tardiness*

- (1) Entering any lecture, laboratory or shop period after the hour that class was scheduled shall constitute a tardiness.
- (2) Entering any lecture, laboratory or shop period which is more than ONE THIRD in progress shall constitute an absence.
- (3) Three tardy arrivals in any one class shall constitute an absence from that class.

c — *Dismission*

Under certain circumstances, an instructor may dismiss any student or students from any class, if in the instructors opinion, the student or students work is satisfactorily completed and/or his or their presence is not conducive to the best efforts and interests of the other students in the class or group.

EXPENSES, TUITION AND FEES

The tuition for all courses varies according to the residential status of the student. For residents of Massachusetts, the rate is one hundred dollars per year, for residents of other states, the fee is two hundred and fifty dollars. The rate for all foreign students is five hundred dollars.

All students pay a registration fee of two dollars and fifty cents.

Students majoring in chemistry pay a laboratory fee of ten dollars. Those students majoring in Textile Engineering or machine design pay a laboratory fee of five dollars. In addition to these laboratory fees, all non-residents of Massachusetts must pay a ten dollar fee for chemicals.

All students are assessed a \$15.00 athletic fee.

The cost of books and supplies varies with the type of course and the year in which it is taken. This cost is more emphasized during the first year and less emphasized during the remainder of the instructional program. This cost varies from approximately fifty dollars to one hundred dollars per year depending, of course, on the aforementioned factors.

Under prevailing conditions it is impossible to estimate the living costs for students. There are many variable factors and much depends on the standard of living of the student.

ENDOWMENTS AND SCHOLARSHIPS

The New Bedford Textile Institute is wholly supported by the Commonwealth of Massachusetts and has no endowments.

There are four scholarships offered and controlled by the school authorities. There are also available about ten other scholarships which are controlled elsewhere. Those which are controlled by the school authorities are as follows:

William Firth Scholarship Fund:

A 3,000 dollar fund deposited in the New Bedford Five Cents Savings Bank. Only the interest of this fund may be used for scholarships.

The Manning Emery, Jr., Scholarship Fund:

A 3,000 dollars fund deposited in the New Bedford Institution for Savings Bank. Only the interest may be used for scholarships.

The Neuss, Hesslein & Co. Scholarship Fund:

A 5,000 dollar fund set up by the Neuss, Hesslein and Co. of New York City. This is a recent contribution and no action has yet been taken in regard to the scholarships to be awarded.

Everett H. Hinckley Scholarship:

This is an annual award of 100 dollars made by the New York Chapter of the New Bedford Textile Institute Alumni Association. It is offered in memory of Everett H. Hinckley, former head of the Institute's Chemistry Department. The other scholarships which are offered and controlled elsewhere are offered by the New England Textile Foundation and the Berkshire Fine Spinning Company.

AWARDS**The National Association of Cotton Manufacturers Medal**

The National Association of Cotton Manufacturers offers a medal to be awarded each year to the student in the Textile Engineering graduating class who shows the greatest proficiency in scholarship. This is determined by an examination of all students records and the medal is awarded to that student having the highest average according to the credit point system of determining averages.

The competition for this medal is also open to all evening students who have completed the full course of study required for a degree in Textile Engineering. The association offering the medal has made it a condition of the award that at least four members of the graduating class be eligible to the competition.

The William E. Hatch Key

This award is made to the member of the freshman class of Textile Engineering, who has the highest credit point average for the year. It is awarded by the Alumni Association of the Institute, to commemorate the day of William E. Hatch's retirement from the presidency of the Institute.

The Morris H. Crompton Award

This key is awarded to the student of the graduating class of Machine Design, who has the highest four year average according to the credit point system of determining averages. It is awarded in honor of Morris H. Crompton, former head of the Department of Engineering.

The Fred E. Busby Award

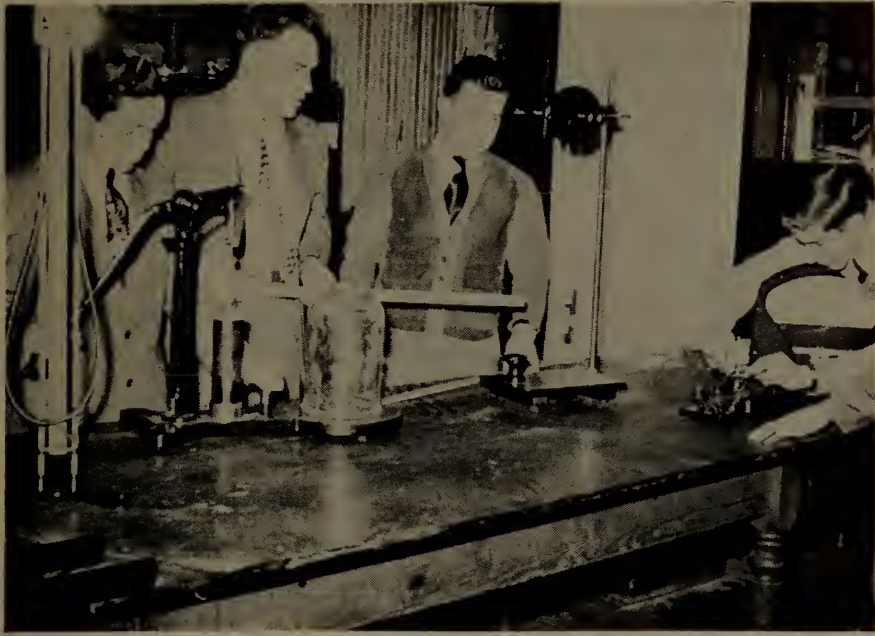
This key is awarded by the Alumni Association to the student of the graduating class of chemistry, who has attained the highest four year average according to the credit point system. It is presented in honor of Fred E. Busby, former head of the Department of Chemistry.

ATHLETICS

The New Bedford Textile Institute, its administration and faculty, approve and encourage a full program of intercollegiate and intramural athletics. The Athletic Council, in cooperation with the student council plans, and provides for, the fullest possible program of inter-class and inter-fraternity sports.

Varsity teams include football, baseball, basketball and soccer. The Institute schedules for its games, most of the recognized colleges of its athletic class. These schedules include many varied and interesting road trips.

The Faculty Committee on Rules and Regulations strictly enforce the eligibility code for membership on athletic teams. This code is based on the Institute's credit point system of determining averages. Under this system the student must have an average of 65% or better in order to take an active part in athletics.



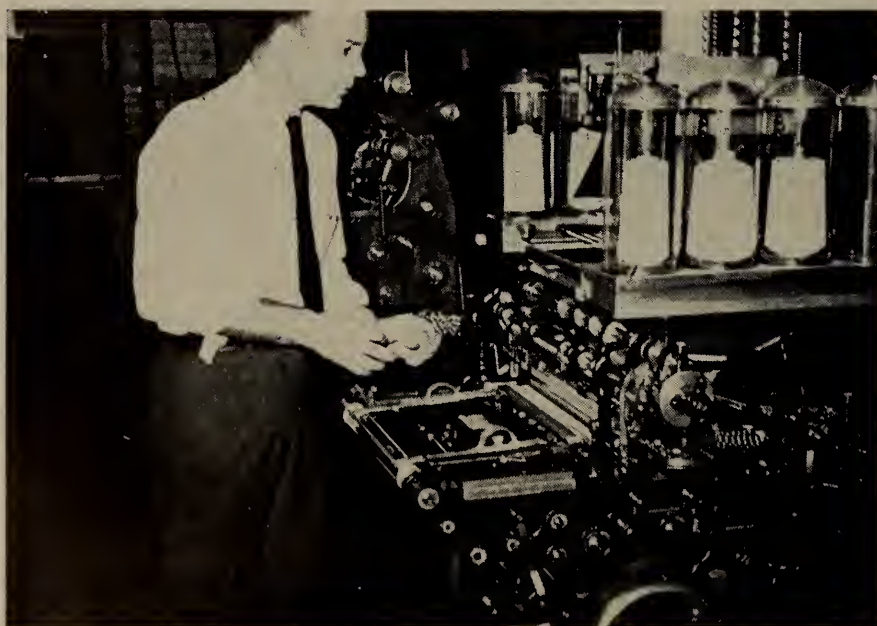
Physics Laboratory



Engineering Drawing



Rayon Testing



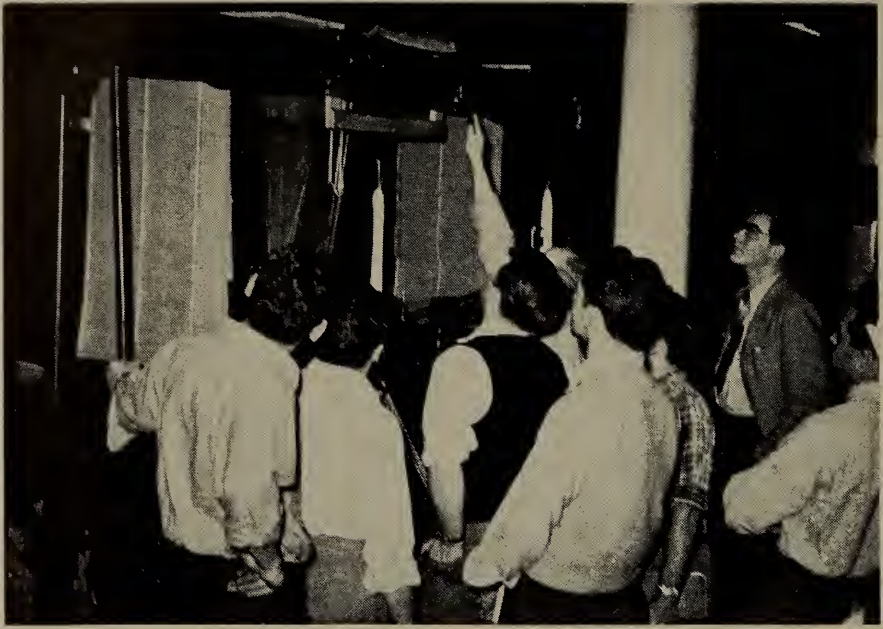
Knitting



Carding



Weaving



Jacquard



Power Sewing



Physics Lecture



Machine Shop

COURSES OF STUDY

DEGREE COURSES — 4 YEARS

1. Textile Engineering
2. Textile Chemistry
3. Machine Design

DIPLOMA COURSES — 3 YEARS

1. General Textile Manufacturing
2. Textile Designing
3. Chemistry, Dyeing and Finishing
4. Knit Goods Manufacturing

CERTIFICATE COURSES — 2 YEARS

1. Textile Technology — primarily for girls
2. Drafting and Machine Shop Practice

EVENING COURSES

1. Carding and Spinning
2. Weaving and Designing
3. Chemistry and Dyeing

CODE TO COURSE NUMBERS

1 — Chemistry	Ch
2 — Engineering	E
3 — Humanities	H
4 — Mathematics	M
5 — Physics	P
6 — Textile Engineering	T.E.

- | | |
|-------------------------|-------------------------------|
| a — Courses T. E. — 100 | Cotton Yarn Preparation |
| b — Courses T. E. — 200 | Weaving |
| c — Courses T. E. — 300 | Designing, Analysis & Testing |
| d — Courses T. E. — 500 | Knitting |

7 — All "S" courses are simplified versions of the original courses.

Bachelor of Science
Major — Textile Chemistry

Through a well balanced program of training in the fundamental sciences and the humanities, together with the practical application of the principles involved, this department trains students for careers in the chemical industries, particularly in the field of textile chemistry, dyeing and finishing.

The curriculum provides a sound fundamental training in the fields of inorganic, organic, analytical and textile chemistry. Courses in mathematics, physics, history, economics, sociology, merchandising and technical writing yield a well-rounded program which prepares the student for industrial professions or for graduate training.

Bachelor of Science
Major — Textile Chemistry

FRESHMAN YEAR

No.	Name	Hours			No.	Name	Hours		
		Cl.	Lab.	Cr.			Cl.	Lab.	Cr.
<i>First Term</i>					<i>Second Term</i>				
M-1A&2	Algebra & Trig.	4	0	4	M-1B&3	Algebra & Anal.			
Ch-1	Inorganic Chemistry	3	6	6		Geom.	4	0	4
H-2	English Composi-				Ch-1	Inorganic Chemistry	3	0	3
	tion I	3	0	3	Ch-2	Qualitative Analysis	2	4	4
E-8	Engineering Drawing	0	4	2	H-2	English Composi-			
H-6	U. S. History	2	0	2		tion II	3	0	3
TE-318	Intro. Survey of				E-9	Engineering Drawing	0	4	2
	Textiles	1	0	1	H-5	General Psychology	2	0	2
TE-323	Microscopy	1	2	2	TE-323	Microscopy	1	2	2
14 12 20					15 10 20				

SOPHOMORE YEAR

<i>First Term</i>					<i>Second Term</i>				
P-1	Physics	3	2	4	P-2	Physics	3	2	4
M-4A	Differential Calc.	3	0	3	M-4B	Integral Calculus	3	0	3
Ch-3	Elem. Quantitative Analysis	2	4	4	Ch-4	Elem. Quantitative Analysis	2	4	4
Ch-7	Elem. Dyeing I	2	4	4	Ch-8	Elem. Dyeing II	2	4	4
Ch-13	Organic Chemistry	1	4	3	Ch-14	Organic Chemistry	1	4	3
H-1	Economics	2	0	2	H-1	Economics	2	0	2
TE-316	Fabric Classification	1	1	1.5	TE-316	Fabric Classification	1	1	1.5
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14 15 21.5					14 15 21.5				

JUNIOR YEAR

<i>First Term</i>					<i>Second Term</i>				
Ch-5	Advanced Quantitative Analysis	1	6	4	Ch-6	Advanced Quantitative Analysis	1	6	4
Ch-9	Advanced Dyeing I	2	6	5	Ch-9A	Advanced Dyeing II	1	6	4
Ch-15	Organic Chemistry (Mfg. of Dyes)	2	6	5	Ch-20	Textile Printing	2	4	4
H-9	Merchandising	2	0	2	H-11	Sociology	2	0	2
TE-107	Cotton Classing	1	1	1.5	TE-307	Color	1	1	1.5
TE-108	Cotton Mfg.	1	0	1	TE-321	Fabric Testing (Physical)	1	2	2
TE-501	Knitting	1	0	1	TE-505	Knitting	1	0	1
<hr/>					<hr/>				
10 19 19.5					9 19 18.5				

SENIOR YEAR

No.	Name	Hours Cl. Lab. Cr.		
	<i>First Term</i>			
Ch-10	Advanced Dyeing III	1	4	3
Ch-11	Advanced Dyeing IV	1	0	1
Ch-18	Textile Finishing	1	6	4
Ch-21	Bacteriology	1	4	3
H-3	Report Writing	2	0	2
TE-321	Fabric Testing (Rayon)	0	2	1
		<hr/>		
		7	22	18

No.	Name	Hours Cl. Lab. Cr.		
	<i>Second Term</i>			
Ch-12	Chem. of Textile Fibers		3	2 4
Ch-17	Indus. Textile Chem. Analysis		1	6 4
Ch-19	Textile Finishing II		1	6 4
Ch-22	Textile Microbiology		1	4 3
Ch-23	Colloid Chemistry		2	4 4
H-4	Business Writing		2	0 2
			<hr/>	
			10	22 21
	Total Cr. hours — 160			

Bachelor of Science Major — Machine Design

Due to the increased demand for men skilled in the field of machine design, the original two-year course in Junior Mechanical Engineering has been increased to a four-year course. The course has been greatly broadened in scope and includes many new academic and technical subjects. The addition of these new subjects, we believe, will give the student the necessary background for one who will compete in the field of Machine Design.

The student is trained thoroughly in the field of mathematics, beginning with a review of high school algebra and continuing through a practical course in applied calculus. These courses in mathematics, particularly the course in trigonometry, are designed to meet the problems ordinarily encountered by one engaged in the various fields of engineering.

Full courses in mechanical drawing, geometry of engineering drawing, mechanisms, jig, fixture and tool design are undertaken. As an aid in the better understanding and application of the principles involved in these courses, other subjects such as applied engineering mechanics, strength of materials, metallurgy, etc., are included in the curriculum.

In the past few years we have received several requests for men skilled not only in machine design but who also had a good basic knowledge of textile machinery. With this in mind we have arranged a special course in the textile division of the school, to be pursued by all taking the course in machine design. This, we believe, will train the student in the general field of machine design and also in the particular field of textile machine design.

As in the past, the student will make frequent trips to a wide variety of industrial plants, thereby gaining a first hand knowledge of actual working conditions and methods.

Bachelor of Science Major — Machine Design

FRESHMAN YEAR

No.	Name	Hours			No.	Name	Hours		
		Cl.	Lab.	Cr.			Cl.	Lab.	Cr.
<i>First Term</i>					<i>Second Term</i>				
M-1A&2	Algebra & Trig.	5	0	5	M-1B&3	Algebra & Anal.			
Ch-101B	General Chemistry	2	2	3		Geom.	5	0	5
H-2	English Comp. I	3	0	3	Ch-101B	General Chemistry	2	2	3
E-8	Engineering Drawing	0	6	3	H-2	English Comp. II	3	0	3
E-1	Machine Tool Lab.	0	4	2	E-9	Engineering Draw.	0	6	3
E-1A	Shop Theory & Calc.	1	0	1	E-1	Machine Tool Lab.	0	4	2
H-6	U. S. History	2	0	2	E-1A	Shop Theory & Calc.	1	0	1
TE-109	Cotton Manufac- turing				H-5	General Psychology	2	0	2
		0	2	1	TE-210	Elem. Weaving	0	2	1
<hr/>					<hr/>				
13 14 20					13 14 20				

SOPHOMORE YEAR

No.	Name	Hours			No.	Name	Hours		
		Cl.	Lab.	Cr.			Cl.	Lab.	Cr.
<i>First Term</i>									
P-1	Physics	3	2	4	P-2	Physics	3	2	4
M-4	Differential Calc.	3	0	3	M-4B	Integral Calculus	3	0	3
E-10	Engineering Draw.	0	7	3.5	E-11	Descriptive Geom.	1	4	3
H-1	Economics	2	0	2	H-1	Economics	2	0	2
E-2	Machine Tool Lab.	0	7	3.5	E-3	Machine Tool Lab.	0	4	2
E-2A	Shop Theory & Calc.	2	0	2	E-3A	Shop Theory & Calc.	2	0	2
E-10A	Heat & Power	2	2	3	E-10B	Heat & Power	2	2	3
					E-14A	Mechanics	3	0	3
					TE-323	Microscopy	0	2	1

year the student studies the processing of rayons, nylon, vinyon and other continuous filaments.

The student must complete other courses of study necessary for one who would compete successfully in the textile field. Among these are thorough courses in knitting, textile dyeing, merchandising, economics, applied electricity, machine tool laboratory practice and modern industrial plant construction.

A review of the curriculum will reveal a rigid four year schedule. However, past experience and the results achieved by our graduates have warranted such a schedule and have shown that its successful completion is well within the grasp of those who will succeed.

Bachelor of Science Major — Textile Engineering

FRESHMAN YEAR

No.	Name	Hours			No.	Name	Hours		
		Cl.	Lab.	Cr.			Cl.	Lab.	Cr.
<i>First Term</i>					<i>Second Term</i>				
M-1A-2	Algebra & Trig.	4	0	4	M-1B&3	Algebra & Anal.			
Ch-101	General Chemistry	2	4	4		Geom.	4	0	4
E-101	Engineering Drawing	0	4	2	Ch-107	Elementary Dyeing	2	4	4
H-2	English Composi- tion I	3	0	3	H-2	English Composi- tion II	3	0	3
H-6	U. S. History	2	0	2	E-102	Engineering Drawing	0	4	2
TE-201	Yarn Calculation	2	0	2	H-5	General Psychology	2	0	2
TE-101	Cotton Yarn Prep.	2	2	3	TE-102	Cotton Yarn Prep.	2	2	3
TE-203	Weaving	1	2	2	TE-202	Warp Preparation	2	0	2
E-1	Machine Tool Lab.	0	2	1	TE-203	Weaving	1	2	2
<hr/>					E-1	Machine Tool Lab.	0	2	1
16 14 23					<hr/>				
					16 14 23				

SOPHOMORE YEAR

<i>First Term</i>					<i>Second Term</i>				
P-1	Physics	3	2	4	P-2	Physics	3	2	4
M-4A	Differential Cal- culus	3	0	3	M-4B	Integral Calculus	3	0	3
H-1	Economics	2	0	2	H-1	Economics	2	0	2
Ch-109	Advanced Dyeing	1	4	3	Ch-109	Advanced Dyeing	1	4	3
TE-103	Cotton Yarn Prep.	2	3	3.5	TE-103	Cotton Yarn Prep.	2	3	3.5
TE-202A	Warp Preparation	1	0	1	TE-108	Cotton Classing	1	1	1.5
TE-204	Weaving	1	3	2.5	TE-204	Weaving	1	3	2.5
TE-301	Textile Designing	1.5	0	1.5	TE-302	Textile Designing	1.5	0	1.5
TE-309	Cloth Analysis	1	2	2	TE-310	Cloth Analysis	1	2	2
TE-317	Hand Loom	0	1	.5	TE-317	Hand Loom	0	1	.5
<hr/>					<hr/>				
15.5 15 23.0					15.5 16 23.5				

JUNIOR YEAR

No.	Name	Hours			No.	Name	Hours		
		Cl.	Lab.	Cr.			Cl.	Lab.	Cr.
<i>First Term</i>					<i>Second Term</i>				
H-9	Merchandising	2	0	2	E-18	Electricity	2	0	2
E-18	Electricity	2	0	2	H-11	Sociology	2	0	2
E-103	Engineering Drawing (Textile Mechanism)	0	2	1	TE-105-106	Combing & Twisting	2	3	3.5
TE-104	Advanced Calculations	2	3	3.5	TE-205	Weaving	1	2	2
TE-205	Weaving	1	4	3	TE-304	Designing	3	0	3
TE-303	Designing	3	0	3	TE-312	Cloth Analysis	1	2	2
TE-307	Color	1	1	1.5	TE-321	Fabric Testing (Physical)	0	2	1
TE-311	Cloth Analysis	1	2	2	TE-322	Fabric Testing (Rayon)	0	2	1
TE-323	Microscopy	1	2	2	TE-323	Microscopy	1	2	2
TE-501	Knitting	1	2	2	TE-504	Knitting	1	1	1.5
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14 16 22.0					13 14 20.0				

SENIOR YEAR

<i>First Term</i>					<i>Second Term</i>				
Ch-18	Textile Finishing	1	6	4	Ch-19	Textile Finishing	1	6	4
H-3	Report Writing	2	0	2	H-4	Business Writing	2	0	2
Ch-121	Rayon Processing	1	0	1	TE-208	Rayon Processing	0	2	1
TE-107	Applied Research	0	3	1.5	TE-206-207	Weaving	1	4	3
TE-206-207	Weaving	1	4	3	TE-107	Applied Research	0	3	1.5
TE-305	Designing	2	1	2.5	TE-306	Designing	2	1	2.5
TE-313	Cloth Analysis	0	2	1	TE-314	Cloth Analysis	1	2	2
TE-505	Knitting	1	1	1.5	TE-508	Knitting	1	1	1.5
8 17 16.5					E-104	Mill Engineering	1	2	2
					9 21 19.5				

Total Cr. Hours — 171

Chemistry, Dyeing and Finishing Course
Diploma — 3 years

FIRST YEAR

COURSE NAME		Cl.	Lab.	Cr.	COURSE NAME		Cl.	Lab.	Cr.
<i>First Semester</i>					<i>Second Semester</i>				
E-103	Mechanics	1	0	1	E-9	Eng. Draw.	0	4	2
E-8	Eng. Draw.	0	4	2	E-1	Machine Shop	0	2	1
Ch-1	Chemistry	3	6	6	Ch-2	Qual. Anal.	2	4	4
TE-301	Designing	1	2	2	TE-403	Microscopy	1	2	2
M-5	Slide Rule	1	0	1	Ch-1	Chemistry	3	0	3
TE-403	Microscopy	1	2	2					
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7 14 14					6 12 12				

SECOND YEAR

<i>First Semester</i>					<i>Second Semester</i>				
TE-307	Color	1	1	1.5	TE-308	Color	1	1	1.5
E-10	Eng. Draw.	0	4	2	E-10	Eng. Draw.	0	4	2
E-2	Machine Shop	0	2	1	E-2	Machine Shop	0	2	1
E-13A	Heat & Power	2	2	3	E-13B	Heat & Power	2	2	3
Ch-3	Quant. Anal.	2	4	4	Ch-8	Elem. Dyeing	1	4	3
Ch-13	Organic Chem.	1	4	3	Ch-14	Org. Chem.	1	4	3
Ch-7	Elem. Dyeing	1	4	3	TE-107	Cotton Class.	1	1	1.5
					TE-109	Cotton Mfg.	1	1	1.5
					Ch-4	Quant. Anal.	2	4	4
7 21 17.5					9 23 20.5				

Chemistry, Dyeing and Finishing Course

THIRD YEAR									
COURSE NAME		Cl.	Lab.	Cr.	COURSE NAME		Cl.	Lab.	Cr.
First Semester					Second Semester				
TE-401	Fabric Test.	0	2	1	Ch-20	Text. Printing	1	6	4
E-18	Electricity	2	0	2	H-1	Economics	2	0	2
Ch-9	Adv. Dyeing	2	6	5	Ch-10	Adv. Dyeing	2	4	4
Ch-15	Adv. Org. Chem.	2	6	5	Ch-6	Adv. Quant. Anal.	1	6	4
H-9	Merchandising	2	0	2					
H-1	Economics	2	0	2					
Ch-5	Adv. Quant. Anal.	1	6	4					
<hr/>					<hr/>				
11 20 21					6 16 14				

General Textile Manufacturing Course
Diploma — 3 years

FIRST YEAR									
COURSE NAME		Cl.	Lab.	Cr.	COURSE NAME		Cl.	Lab.	Cr.
First Semester					Second Semester				
TE-101	C.Y.P.	2	2	3	TE-102	C.Y.P.	2	2	3
TE-203	Weaving	1	2	2	TE-204	Weaving	1	2	2
TE-309	Analysis	1	2	2	TE-202	Warp Prep.	2	0	2
TE-301	Designing	1.5	0	1.5	TE-302	Designing	1.5	0	1.5
TE-317	Hand Loom	0	1	0.5	TE-310	Analysis	1	2	2
E-14S	Mechanics	1	0	1	TE-317	Hand Loom	0	1	0.5
E-101	Eng. Draw.	0	4	2	E-102	Eng. Draw.	0	4	2
M-5	Slide Rule	1	0	1	Ch-107	Elem. Dyeing	2	4	4
Ch-101A	Chemistry	2	4	4	TE-403	Microscopy	1	2	2
TE-201	Yarn Calcs.	2	0	2	TE-402	Rayon Test.	0	2	1
TE-403	Microscopy	1	2	2					
TE-402	Rayon Testing	0	2	1					
<hr/>					<hr/>				
12.5 19 22					10.5 19 20				

SECOND YEAR

First Semester					Second Semester				
TE-103	C.Y.P.	2	3	3.5	TE-104	Adv. Calc.	2	3	3.5
TE-204	Weaving	1	3	2.5	TE-106	Appl. Res.	0	3	1.5
TE-303	Designing	3	0	3	TE-107	Cotton Class	1	1	1.5
TE-311	Analysis	1	2	2	TE-205	Weaving	1	3	2.5
E-103	Eng. Draft.	0	3	1.5	TE-304	Designing	3	0	3
E-1	Machine Shop	0	2	1	TE-312	Analysis	1	2	2
E-13A	Heat & Power	2	2	3	E-1	Mach. Shop	0	2	1
Ch-109	Adv. Dyeing	1	4	3	E-103	Eng. Draw.	0	3	1.5
TE-403	Microscopy	1	2	2	E-13B	Heat & Power	1	2	2
					TE-401	Fabric Test.	0	2	1
					Ch-109	Adv. Dyeing	1	4	3
<hr/>					<hr/>				
11 21 21.5					10 25 22.5				

General Textile Manufacturing Course

THIRD YEAR

COURSE NAME		Cl. Lab. Cr.			COURSE NAME		Cl. Lab. Cr.		
First Semester					Second Semester				
TE-105	Comb. & Twist.	2	3	3.5	TE-106	Appl. Res.	0	3	1.5
TE-205	Weaving	1	4	3	TE-206&207	Weaving	1	2	2
TE-305	Jacquard Des.	2	1	2.5	TE-306	Jacquard Des.	2	1	2.5
TE-307	Color	1	1	1.5	TE-308	Color	1	1	1.5
TE-313	Analysis	0	2	1	TE-314	Analysis	1	2	2
E-18	Electricity	2	0	2	E-104	Mill Eng.	1	2	2
TE-510	Knitting	1	2	2	Ch-19	Text. Finish	1	6	4
TE-108	Rayon Proc.	0	2	1	TE-108	Rayon Proc.	0	2	1
H-9	Merchand.	2	0	2	H-1	Economics	2	0	2
H-1	Economics	2	0	2					
Ch-18	Text. Finish.	1	6	4					
14 21 24.5					9 19 18.5				

Textile Designing Course Diploma — 3 years

FIRST YEAR

COURSE NAME		Cl. Lab. Cr.			COURSE NAME		Cl. Lab. Cr.		
First Semester					Second Semester				
TE-101	C.Y.P.	1	2	2	TE-102	C.Y.P.	2	2	3
TE-203	Weaving	1	2	2	TE-204	Weaving	1	2	2
TE-309	Analysis	1	2	2	TE-202	Warp Prep.	2	0	2
TE-301	Designing	3	0	3	TE-302	Designing	3	0	3
TE-317	Hand Loom	0	1	0.5	TE-310	Analysis	1	2	2
E-14S	Mechanics	1	0	1	TE-317	Hand Loom	0	1	0.5
M-5	Slide Rule	1	0	1	E-102	Eng. Draw.	0	4	2
E-101	Eng. Draw.	0	4	2	Ch-107	Elem. Dyeing	2	4	4
TE-201	Yarn Calcs.	2	0	2	TE-403	Microscopy	1	2	2
Ch-101A	Chemistry	2	4	4	TE-402	Rayon Test.	0	2	1
TE-403	Microscopy	1	2	2					
TE-402	Rayon Test.	0	2	1					
13 19 22.5					12 19 21.5				

SECOND YEAR

First Semester				Second Semester					
TE-103	C.Y.P.	1	2	2	TE-104	Adv. Calcs.	1	2	2
TE-204	Weaving	1	5	3.5	TE-107	Cotton Class.	1	1	1.5
TE-303	Designing	3	0	3	TE-205	Weaving	1	6	4
TE-311	Analysis	1	2	2	TE-304	Designing	3	0	3
TE-312	Analysis	1	2	2	TE-308	Color	1	1	1.5
TE-307	Color	1	1	1.5	TE-313	Analysis	1	4	3
TE-402	Rayon Test.	0	3	1.5	E-1	Machine Shop	0	2	1
E-103	Eng. Draw.	0	3	1.5	E-103	Eng. Draw.	0	3	1.5
E-1	Machine Shop	0	2	1	E-13B	Heat & Power	1	0	1
E-13A	Heat & Power	2	0	2	TE-401	Fabric Test.	0	2	1
Ch-109	Adv. Dyeing	1	4	3	Ch-109	Adv. Dyeing	1	4	3
<hr/>				<hr/>					
11 24 23				10 25 22.5					

Textile Designing Course**THIRD YEAR**

COURSE NAME			COURSE NAME		
<i>First Semester</i>			<i>Second Semester</i>		
TE-206	Weaving	1 4 3	TE-206	Weaving	1 5 3.5
TE-305	Jacquard Des.	1 5 3.5	TE-306	Jacquard Des.	1 5 3.5
TE-314	Analysis	2 5 4.5	TE-314	Analysis	1 4 3
TE-510	Knitting	1 1 1.5	TE-315	Styling	1 3 2.5
TE-308	Color	1 1 1.5	E-104	Mill Eng.	1 2 2
E-18	Electricity	2 0 2	H-1	Economics	2 0 2
H-9	Merchandising	2 0 2	TE-401	Fabric Test.	0 2 1
H-1	Economics	2 0 2	Ch-19	Text. Finish.	1 6 4
Ch-18	Text. Finish	1 6 4			
<hr/>			<hr/>		
13 22 24			8 27 21.5		

**Drafting and Machine Shop Practice
Certificate — 2 years****FIRST YEAR**

COURSE NAME			COURSE NAME		
<i>First Semester</i>			<i>Second Semester</i>		
M-1S	Mathematics	4 0 4	M-2S	Mathematics	4 0 4
P-1S	Physics	2 0 2	P-2S	Physics	2 0 2
M-5	Slide Rule	1 0 1	E-9	Eng. Draw.	1 10 6
E-8	Eng. Draw.	1 10 6	E-3, 4	Machine Shop	1 10 6
E-1, 2	Machine Shop	1 10 6			
<hr/>			<hr/>		
9 20 19			8 20 18		

SECOND YEAR

<i>First Semester</i>			<i>Second Semester</i>		
E-13A	Heat & Power	3 0 3	E-13B	Heat & Power	3 0 3
E-18	Electricity	2 2 3	E-18	Electricity	2 2 3
E-10	Eng. Draw.	1 8 5	E-10	Eng. Draw.	1 8 5
E-5, 6	Machine Draw.	1 10 6	E-7	Machine Shop	1 10 6
TE-403S	Microscopy	1 2 2	H-1	Economics	2 0 2
H-1	Economics	2 0 2			
<hr/>			<hr/>		
10 22 21			9 20 19		

**Textile Technology Course
Certificate — 2 years****FIRST YEAR**

COURSE NAME			COURSE NAME		
<i>First Semester</i>			<i>Second Semester</i>		
TE-109	Cotton Mfg.	1 1 1.5	TE-203	Weaving	1 1 1.5
TE-201	Yarn Calcs.	2 0 2	TE-302	Designing	1 2 2
TE-203	Weaving	1 1 1.5	TE-310	Analysis	1 2 2
TE-301- Designing	}	1 2 2	TE-308	Color	0 2 1
TE-317- Hand Loom			TE-316	Fabric Class.	1 1 1.5
TE-309	Analysis	1 2 2	Ch-107	Elem. Dyeing	2 4 4
TE-307	Color	1 1 1.5	TE-401	Fabric Test.	0 3 1.5
TE-316	Fabric Class.	1 1 1.5	TE-402	Rayon Test.	1 6 4
Ch-101	Chemistry	2 4 4	TE-403	Microscopy	1 2 2
TE-401	Fabric Test.	0 2 1			
TE-402	Rayon Test.	0 4 2			
TE-403	Microscopy	1 2 2			
<hr/>			<hr/>		
11 20 21			8 23 19.5		

Textile Technology Course

SECOND YEAR

COURSE NAME		Cl. Lab. Cr.			COURSE NAME		Cl. Lab. Cr.		
First Semester					Second Semester				
TE-303	Designing	1	2	2	TE-304	Designing	1	2	2
TE-305	Jacquard Des.	1	2	2	TE-306	Jacquard Des.	1	2	2
TE-311	Analysis	1	2	2	TE-312	Analysis	1	2	2
TE-315	Styling	2	0	2	TE-315	Styling	2	0	2
TE-318	Int. Survey of Text	1	0	1	TE-318	Int. Survey of Text.	1	0	1
H-1	Economics	2	0	2	H-1	Economics	2	0	2
H-9	Merchandising	2	0	2	TE-402	Rayon Test.	0	3	1.5
TE-401	Fabric Test.	0	3	1.5	TE-403	Microscopy	1	4	3
TE-402	Rayon Test.	0	3	1.5	TE-401	Fabric Test.	0	3	1.5
TE-403	Microscopy	1	4	3	TE-107	Cotton Class.	1	1	1.5
TE-204	Weaving	1	1	1.5	TE-205	Weaving	1	2	2
Ch-113	Quant. Anal.	2	4	4	Ch-120	Text. Print.	1	4	3
14 21 24.5					12 23 23.5				

DEPARTMENT OF CHEMISTRY

Ch 1 Inorganic Chemistry

This course is required of those students enrolled for the Bachelor of Science in Chemistry Degree. The course is divided into two sections. Section I is taken during the first three months of the first semester and during the second semester and comprises a thorough study of basic chemical facts (study of matter, atomic structure and its applications to chemical reactions, the states of matter, solutions and equilibrium; certain elements and their compounds are studied in order to show more clearly the relation between theory and practice). Section II is taken during the last month of the first semester and comprises a study of the manufacture of chemical materials of importance to Textile Chemists (acetic acid, sulfuric acid, soda-ash, caustic soda, the artificial fibers, etc.). The laboratory work associated with Ch-1 is designed to accompany the lectures very closely and thus enable the student to better learn the facts and theories they are studying.

Prerequisite: High school chemistry

Text: Inorganic Chemistry by Jones

Laboratory Course in General Chemistry by Carter & Cole
Mr. Fiocchi

Ch-2 Qualitative Analysis

This course enables the student to tell what inorganic, and a few organic, substances are present in a compound. The latest semi-micro technique of analysis is used. In the laboratory the student applies what he has studied in the analysis of both "known" and "unknown" materials. Problem work dealing with equilibrium and the other important phases of qualitative analysis is stressed and the student is taught how to think for himself.

Prerequisite: Ch-1

Text: Fundamentals of Semi-micro Qualitative Analysis by Engelder.

Mr. Fiocchi

Ch-3 Quantitative Analysis

The lectures in this course comprise a thorough and complete discussion of the theories of solutions, a quantitative approach to oxidation-reduction reactions (redox reactions) and a study of some precipitation methods. The laboratory work is an application of the lectures. It consists of the calibration of the volumetric ware used and the analysis of materials by neutralization, oxidation-reduction and precipitation methods. Quality rather than quantity is stressed.

Prerequisite: Ch-1 and Ch-2

Text: Textbook of Quantitative Inorganic Analysis: Kotthoff and Sandell

Manual of Quantitative Analysis by Clippinger

Professor Fenaux

Ch-4 Quantitative Analysis II

This course is a continuation of Ch-3 and consists of a study of the gravimetric methods of analysis.

Prerequisite: Ch-3

Text: As for Ch-3

(*Instructor*) As for Ch-3

Ch-5 Advanced Quantitative Analysis**Ch-6 Advanced Quantitative Analysis II**

These are primarily laboratory courses in which the student analyzes many materials of a more advanced nature than encountered in Ch-3 and 4. He employs many methods used in commercial practice and analyzes steel, copper alloys, ores, silicate rocks, minerals, etc. The student uses electroanalysis, potentiometry, photometry, colorimetry and gas analysis. He also studies more at length and more deeply certain special topics of Quantitative Analysis (indicators, redox equilibrium,

etc.). Frequent reference is made to recent advances and discoveries in current chemical literature.

Prerequisites: Ch-3 and Ch-4

Text: As for Ch-3 and Ch-4 plus adaptations of experiments from the current chemical literature.

Professor Fenaux

Ch-7 Elementary Dyeing

This course consists of (1) a study of the physical and chemical constitution of the textile fibers, both natural and artificial; (2) a study of the action of physical and chemical agents upon the fibers; and (3) a study of the methods of application and the effects of the various classes of dyes upon fibers.

Prerequisite: Ch-1

Text: Departmental lecture notes

Professor Dupre

Ch-8 Elementary Dyeing II

This course, which is a continuation of Ch-7, teaches the student how to process the various fibers; how to test the dyed fibers for the various characteristics and how to enhance certain of these characteristics by special treatment of the fibers, before and/or after dyeing.

Prerequisites: Ch-7

Text: Departmental lecture notes

Professor Dupre

Ch-9 Advanced Dyeing I (Introduction to Textile Printing)

In this course the student is introduced to the methods of textile printing (roller, screen, hand block, etc.) and the basic styles of printing (direct, discharge and resist). The preparation of print pastes for direct style printing of direct, basic, mordant insoluble azo, vat, leuco vat dyes, resin bonded pigments and oxidation colors is considered in detail, especially the complex chemical considerations of many of these print color preparations. All prepared color pastes are roller printed and the prints finished off by the students.

Text: Printing Outline (only) by Grimshaw and Dupre

Professor Dupre

Ch-9A Advanced Dyeing II

This course is taken concurrently with Ch-20 in order that the special attention necessary in preparing ground shade for discharge printing and the details of over-dyeing resist printed fabrics may be better understood by the student. The theory of the selection of dyes for those purposes and the need for the addition of special chemical agents to the dyebaths is studied in detail.

Text: Lectures and reference reading

Professor Dupre

Ch-10 Advanced Dyeing III

The theory and practice of color matching are principally emphasized in this course. The student is taught proper method of obtaining a given shade by using a combination of several dyes. The testing of various classes of dyestuffs for their coloring powers and money value is included. The characteristics of the various dyestuff combinations is considered.

Prerequisites: Ch-7 and Ch-8

Text: Departmental lecture notes

Professor Dupre

Ch-11 Advanced Dyeing IV (Dyeing and Finishing of Knit Goods)

Preparation for and dyeing of hosiery and other knitted fabrics. This course includes the theory and reason for preboarding nylon hose and the presetting of

nylon and other synthetic fiber fabrics. The finishing and drying of hosiery and other knitted fabrics are studied.

Text: Lectures and assigned reading of selected articles from trade journals.

Professor Dupre

Ch-12 Chemistry of Textile Fibers

A lecture course emphasizing: the relationship between the chemical structure and physical properties of fibers; the nature of the chemical reactions which produce degradation of fibers; the production of synthetic fibers.

Text: Lecture sheets

Professor Dupre

Ch-13 Organic Chemistry

This course consists of a study of those compounds of carbon comprising what is known as the "aliphatic" family. Particular stress is placed upon structural formulas while a classification of properties and group reactions is made. The laboratory course comprises a study of the more common methods of synthesis, the preparations exemplifying the principles studied in the lectures.

Prerequisites: Ch-1 and Ch-2

Text: The Chemistry of Organic Compounds by Conant & Blatt

Professor Broadmeadow

Ch-14 Organic Chemistry II

This course is a continuation of Ch-13 in which compounds of carbon constituting the "aromatic" family and also certain heterocyclic compounds are studied.

Prerequisites: Ch-1, Ch-2 and Ch-13

Text: The Chemistry of Organic Compounds by Conant & Blatt

Professor Broadmeadow

Ch-15 Organic Chemistry III

Manufacture of Dyes and Intermediates

This course is a specialized continuation of Ch-13 and Ch-14. It deals with the chemical nature of dyes, their preparation as well as of their intermediates. In the laboratory, the student prepares certain intermediates and dyes. He then tests them by comparing material dyed with his dyes to fibers dyed with commercially prepared dyes of the same class.

Prerequisites: Ch-13 and Ch-14

Text: The Synthetic Dye Stuffs and Intermediate Products by Cain & Thorpe

Professor Broadmeadow

Ch-16 Industrial Textile Chemical Analysis I

The student learns, during this course, how to determine the properties, and analyze, many of the chemical materials used in the textile industry. He will analyze soap, bleaching agents, caustic soda, soda-ash, etc. He is expected to apply the knowledge and experience acquired during the previous courses in Chemistry.

Prerequisites: Ch-3, 4, 5 and 6

Text: Analytic Methods for a Textile Laboratory — AATCC

Professor Tripp

Ch-17 Industrial Textile Chemical Analysis II

This course, a continuation of Ch-16, teaches the student how to analyze coal, oil, water, certain types of organic materials (using the Kjeldahl Method) and finishing compounds.

Prerequisites: Ch-3, 4, 5 and 6

Text: Analytic Methods for a Textile Laboratory — AATCC

Professor Tripp

Ch-18 Textile Finishing I

This course deals with the study of the finishing of textile fabrics. Lectures explain the theory and functions of the machinery involved in the finishing of the common textile fabrics. Practice in the singeing, scouring, bleaching, drying,

calendering and mercerization of cotton cloth is provided in the finishing laboratory. The finishing of rayon, nylon and mixed fabrics is also studied.

Prerequisites: Ch-7, 8, 9, 10, 13, 14

Text: Introduction to Textile Finishing, Marsh

Professors Broadmeadow, Dupre, Tripp

Ch-19 Textile Finishing II

This course is a continuation of Ch-18. The processing of wool, aralac and mixed fabrics is studied. The latest methods and machinery used in the industry are discussed and constant consultation of the literature on the subject is required. The student is given practice in the application of dyestuffs by the padder and jigger. The methods of yarn dyeing and the machinery involved, the organization and management of finishing plants are studied. The course is supplemented, and its value enhanced, by field trips to bleacheries, dyehouses and printing plants.

Prerequisites: Ch-7, 8, 9, 10, 13, 14

Text: Introduction to Textile Finishing — Marsh

Professors Broadmeadow, Dupre, Tripp

Ch-20 Textile Printing

This course is a continuation of Ch-9 and 9A in which the preparation of print colors for discharge and resist styles of printing are studied. The means by which the various effects are obtained are discussed in detail. The various preparations are screen printed and finished off by the students. This course is carried out in conjunction with Ch-9A.

Prerequisites: Ch-7, 8, 9, 10, 13, 14.

Text: Outline sheets

Professor Dupre

Ch-21 Elementary Bacteriology

An introductory study of bacteria; their methods of cultivation and identification.

Text: Lecture sheets

Professor Tripp

Ch-22 Textile Microbiology

This course includes the study of various micro-organisms and their importance to man and his textile world. Sterilization, disinfection, fumigation and staining, and methods of studying the action of molds and bacteria on textile fabrics are considered. Laboratory work includes preparation and sterilization of culture media, staining and microscopic observation of bacteria, mildew-proofing tests on textile fabrics.

Prerequisite Ch-21

Text: Lecture sheets — Tripp

Professor Tripp

Ch-23 Colloid Chemistry

An introduction to the colloidal state of matter, covering a consideration of the characteristics and behavior of colloidal substance; methods of preparing colloidal substances; a study of natural colloidal substances and a special study of the application of colloidal behavior to the chemistry of textiles, dyeing and finishing.

In the laboratory the student observes the fundamental characteristics and behavior of materials in the colloidal state; learns how to prepare colloidal substances and applies this knowledge to selected problems dealing with textile chemistry, dyeing and finishing.

Prerequisites: Ch-1, 2, 7, 8, 9, 10, 11, 12, 13, 14: M-4A & M-4B

Text: Modern Colloids — Dean: Selected Experiments in Colloid Chemistry — Fenaux

Professor Fenaux

Ch-101A General Chemistry

This is an introductory course in Chemistry required of all students attending the Institute, with the exception of those enrolled for the degree in chemistry,

during their freshman year. It comprises a general survey of chemistry, its basic laws and theories, a general study of the commoner elements both metallic and non-metallic and a study of the use and application of chemistry to daily life. In the laboratory work which accompanies this course, the student performs experiments selected with a view to enabling him to learn to draw correct conclusions from definitive happenings. It also enables him to acquire a certain manipulative technique in using the basic chemical tools.

Text: General and Applied Chemistry — Currier & Rose

New Laboratory Experiments in Practical Chemistry — Black
Mr. Fiocchi

Ch-101B General Chemistry

This is an introductory course especially designed for students enrolled for the degree in machine design during their freshman year. In addition to covering the topics dealt with under Ch-101A, material of great importance to students of the metals profession are studied. These topics include: Industrial electro-chemical processes; commercial production and utilization of the most valuable acids, bases and salts of industry; the chemistry of cutting oils and protective coatings for metals.

Text: General Chemistry — Schoch, Felsing and Watt

Mr. Fiocchi

Ch-107 Elementary Dyeing

This course is adapted to the needs of the student taking the Textile Engineering Course. The content of this course is essentially that of Ch-7 only in a much shortened form. Much of the elaborate knowledge and laboratory work is omitted. The student obtains sufficient knowledge to enable him to become familiar with the terms and practices of the Dyeing Industry.

Prerequisite: Ch-101A

Text: Departmental lecture notes

Professors Dupre and Broadmeadow

Ch-109 Advanced Dyeing

This course is adapted to the needs of the students taking the Textile Engineering Course. The contents of this course are essentially that of Ch-9 only in a much shortened form.

Prerequisite: Ch-107

Text: Departmental lecture notes

Professor Dupre

Ch-113 Quantitative Analysis

This is a semester course designed primarily for students in the Textile Technology Course. It is so designed that the student acquires a working knowledge of the fundamentals of volumetric and gravimetric analysis: concentration of solutions, normality and how determined, use of the burette and other volumetric apparatus, simple neutralization titrations, pH — its meaning and properties; the use of the analytical balance, the make-up and use of the Gooch filter, chemical factors and their applications, simple gravimetric processes.

Upon the successful completion of this course, the student is well equipped to perform simple, routine analytical work and understand what she is doing.

Prerequisite: Ch-101A

Text: A Short Course in Quantitative Analysis — Willard, Furman & Flag

Professor Fenaur

Ch-120 Textile Printing (Screen Printing)

This is a semester course given in collaboration with the Designing Department to the students in the Textile Technology Course. The students learn how to make their own designs, their own screens, how to print their designs and finish the prints. They are given some training in the making of the pastes and dyes and the simplified reactions involved in the printing.

Prerequisite: Ch-101A and Ch-107

Text: The Silk Screen Printing Process — Biegeleisen & Bosenbark
Professor Giblin, Professor Tripp

Ch-121 Manufacture of Synthetic Fibers

This is a lecture course for the Seniors in the Textile Engineering Course. The student learns how the various synthetic fibers, both filament and yarn forms, are made, starting with their raw materials up to their emergence as yarns.

Text: Lecture notes and technical bulletins.

Professor Dupre

DEPARTMENT OF ENGINEERING DIVISION OF MACHINE DESIGN

E-1 through E-7 Machine Tool Manufacturing

A continuous course systematically arranged according to the tool course involved. Consists of a thorough study of the most modern machinery used in the present day machine shop practice. The student is trained in the use of measuring instruments, turning, facing, boring, etc. Continued instruction is given on all machinery, including the miller, shaper, a planer and grinders. This course is supplemented by lectures in shop theory and classes in shop calculations.

Text: "Machine Tool Operations" — Burghardt

Professor Bayreuther and Mr. Barylski

E-8 Engineering Drawing

The use and care of the drawing instruments, lettering, theory of shape description, orthographic projection, sketching, sectional views, auxiliary views, methods of dimensioning, screw fasteners, isometric, detail and assembly of machine parts.

Text: "Technical Drawing" — Giesecke

Professor Foster and Mr. Barylski

E-9 Engineering Drawing

Continuation of E-8

Text: "Technical Drawing" — Giesecke

Professor Foster and Mr. Barylski

E-10 Engineering Drawing

Complete detail and assembly drawings of small machines, with complete practical limit dimensions and tolerances, notes and all information necessary for a working drawing.

Text: "Technical Drawing" — Giesecke

Professor Foster and Mr. Barylski

E-11 Descriptive Geometry

A more direct method of the applications of the principles of descriptive geometry from the point of view of the engineer. A wide variety of topics such as straight lines, curves and curved lines, planes, intersections and development of surfaces, single and warped curved surfaces, double curved surfaces.

Prerequisite: E-8, E-10

Text: "Geometry of Engineering Drawing" by Hood

Professor Foster

E-12 Electrical Drafting

Consists of both lecture and drafting room practice. Considers the proper methods of laying out wiring for both light and power. All proper sizes for wire, protective devices, etc., are determined by actual calculation according to the loads involved. Constant reference is made to the recommendations of the National Board of Fire Underwriters.

Prerequisite: E-18

Text: "Electrical Drafting" by Bishop

Professor Foster and Mr. Tinkham

E-101 Engineering Drawing

A course especially arranged for the students of textile engineering. Consists of

detail and assembly drawing with the proper application of dimensions, tolerances, etc. A study of gears and cams as applied to textile machinery is also taken.

Text: Technical Drawing — Giesecke

Professor Foster and Mr. Barylski

E-102 Engineering Drawing

A continuation of E-101.

E-103 Engineering Drawing

A special study of textile machinery mechanisms.

Prerequisite: E-101 and E-102

Text: Lecture sheets — Foster

Professor Foster and Mr. Barylski

E-13A, E-13B Heat and Power

A typical power plant, including the various types of boilers, heaters, pumps, steam engines, turbines and all the necessary auxiliaries and accessories as found in a modern power plant is studied in detail. Calculations for evaporation, efficiency, horsepower, boiler rating, heat, fuel consumption, heating surface, boiler losses, etc., are determined in lecture periods. Practice is given in handling steam engines, apparatus and equipment and exercises also consist of setting valves on the engine and taking and determining indicator diagrams.

Prerequisite: M-1, M-4 and P-1

Text: "Heat Engines" by Allen and Busby

Mr. Barylski

E-14A Applied Engineering Mechanics

A study of those topics ordinarily considered under the subject of statics. The various force systems, friction, centroids and center of gravity, moments of inertia of areas, etc.

Prerequisites: M-1, M-4, P-1

Text: "Applied Engineering Mechanics" by Jensen

Mr. Tinkham

E-14B Applied Engineering Mechanics

A study of those topics ordinarily considered under the subject of dynamics, kinematics of rectilinear motion, kinetics of rectilinear motion, curvilinear motion, kinematics and kinetics of rotation, plane motion, work, power and energy, impulse and momentum.

Text: "Applied Engineering Mechanics" by Jensen

Mr. Tinkham

E-15 Manufacturing Analysis

A study of the organization and coordination of both manufacturing processes and equipment, and operation planning.

Prerequisites: E-1, E-7, E-8, E-10

Text: Manufacturing Analysis by Kipers

Professor Foster and Professor Bayreuther

E-16A, E-16B Strength of Materials

Simple stresses, shear, riveted joints, stresses in thin walled cylinders, torsion, beams, deflections, combined axial and bending stresses.

Prerequisites: M-4, E-14A

Text: Strength of Materials — Timoshenko and McCoulough

Mr. Tinkham

E-17 Metallurgy

A lecture course on the various processes of working metals and separating them from their ores.

Prerequisite: Ch-1, E-1, E-7

Text:

Mr. Fenaux

E-18 Electric Circuits and Machines

A thorough study of direct and alternating circuits, their characteristics and laws. Detailed consideration is given the characteristics and operation of both direct and alternating current motors and generators of various types.

Text: "Electric Circuits and Machines," by Lister

Prerequisite: M-1, M-4, P-2

Mr. Tinkham

E-19 Pattern Making

A study of pattern making as associated with foundry and metal trades. In order that the student will design more intelligently he is instructed in the various phases of this trade, *i.e.*, the use of the shrinkage rule, allowing for draft, etc.

Prerequisites: E-1, E-7 and E-8, E-10

Text: "Pattern Making," by McCaslin

Professor Foster

E-20A Mechanisms

A study of mechanisms and machines, transmission of motion by the various means, friction wheels, flexible connectors, cams, centres, gears, etc. A study is also made of velocity diagrams and accelerations in mechanisms.

Text: Mechanics of Machinery, by Ham and Crane

Professor Foster

E-20B Mechanisms

A continuation of E-20A.

Prerequisites: M-1, M-4, E-14A and B

Professor Foster

E-21 Tool Inspection

A careful study of the use and application of precision instruments as applied to tool inspection. This course includes both lectures on the proper use of these instruments and actual laboratory practice in tool inspection. Laboratory practice includes the use of the various precision gages, size block, shadow graphs, hardness testers, sine bars, etc.

Prerequisites: E-1, E-7, E-8, 9, 10, M-1, M-2

Text: "Industrial Inspection Methods," by Michelin

Professor Bayreuther

E-22 Jig, Fixture and Tool Design

This course consists of both lectures on the various types of jigs, fixtures and tools, and actual practice in the drafting room. The student is instructed in the generally accepted methods of construction, the proper allowances, fits, clearances, etc. Particular attention is paid to the simplicity of construction, always keeping in mind the use to which tool is to be put.

Prerequisites: E-1, E-7, M-1, M-2

Text: "Tool Design," by American Society of Tool Engineers

Professor Foster

E-23A Machine Design

Consists of both, lectures and actual drafting room practice. For the most part of design is empirical but the student is encouraged to use, whenever possible, a combination of empirical and scientific design. In this manner he will draw into use a good many of the principles he has become familiar with in his study of mathematics, physics, chemistry, mechanics, etc. He is also encouraged in the frequent use of the many reference and hand books that are available.

Prerequisite: First three years of course

Texts: Machine Design by Faires

Machine Design by Albert

Professor Foster

E-23B Machine Design

A continuation of E-23A

Prerequisite: First three years of course

Texts: Machine Design by Faires

Machine Design by Albert

Professor Foster

E-24 Industrial Plants

This course, consisting of both lectures and drafting room practice, is designed to familiarize the student with modern plant layout. Particular attention is paid to the proper layout of machinery, modern lighting methods and in general those things which contribute to better working conditions. He will be assigned a project to carry out in the drafting room and will be guided and advised by his instructor.

Prerequisite: First 3 years of course

Text: "Planning Industrial Structure," Dunham

Professor Foster

E-104 Mill Engineering

Proficiency in this course depends on the thoroughness with which the work of the previous courses was carried on. It consists of lectures supplemented by work in the drafting room. Problems in design construction and equipment of textile mills are taken up by the student. Each student must determine the machines and equipment required for manufacturing a certain type of goods assigned to him, and floor plans are made with the machines in their proper positions. The method of generating and transmitting the power, with the type of drive to be used and the necessary horsepower of the motors needed must be determined. Methods of lighting, heating and ventilation, as well as protection from fire are also taken into consideration.

Prerequisites: First three years, Textile Engineering

Texts: Lecture Sheets

Professor Holden and Professor Foster

DEPARTMENT OF ENGINEERING DIVISION OF HUMANITIES

H-1 Economics

Problems in textile management, production, labor relations, social, accident and fire insurance, stabilization, business policies, depreciation and obsolescence, financial setup, taxes, tax returns.

Text: "Fundamentals of Economics," Gemmill

Mr. Sullivan

H-2 Freshman English

The Macmillan Handbook of English — John M. Kierzek

Readings for Today — E. P. Lawrence & Herbert Weisinger

Mr. Silva

H-3 Technical Report Writing

This course is designed to meet the requirements of technical reporting. Its approach is a flexible one: for this reason it is concerned merely with basic principles relating to structure, organization, and effective communication. No attempt is made to establish any standardized forms in technical report writing.

Writing the Technical Report — J. Raleigh Nelson

Mr. Silva

H-4 Business Writing

Attempts to introduce the undergraduate student to the practical features of business letter writing. Stenographic details are touched upon lightly. Extraneous matter is omitted. Main emphasis is placed on the most effective point of view.

Effective letters in Business — Robert L. Shurter

Practical Business English for Colleges — Charles F. Walker, Robert R. Aurner
Mr. Silva

H-5 General Psychology

The aim of this course is to help the student develop an understanding of some of the principles of psychology and their application to everyday life. Topics to be included are growth and development, learning, motivation, emotion and feeling, intelligence, human adjustment, mental illness, vocational guidance, and crime and delinquency. Special attention will be given to the study of the dynamics of mental hygiene and the adjustive process.

Text: Psychology — Munn

Mr. Sullivan

H-6 United States History

The aim of this course is to provide the student with a clear over-all picture of the history of the United States to the present time. Emphasis will be placed on such topics as the colonial background, the American Revolution, the founding of the National Government, Manifest Destiny, The Civil War, industrialism, expansion, World War I, world depression, the New Deal and World War II.

The first half of the course will cover the period from colonization to the Civil War. The second half will be the continuation of the first, covering the period from the Civil War through World War II. Special attention will be given to the period from World War I to the present.

Text: A Short History of American Democracy — Hicks

Mr. Sullivan

H-7 Industrial Psychology

The purpose of this course is to assist the student in developing an understanding of the principles of psychology as applied to industry and business. Topics to be included are individual differences and their nature, job satisfaction, industrial morale, incentives, job analysis, leadership and supervision, industrial conflict, unemployment, theory of psychological testing in industry, measurement of attitudes in industry, fatigue, accidents, the maladjusted worker and the Hawthorne studies.

Text: Industrial Psychology — Maier

Mr. Sullivan

H-8 Labor Relations

This course presents labor problems as they are directly related to day-to-day relations of labor and management. The treatment, therefore, is practical rather than theoretical. The course considers (1) the classification of the causes and types of unemployment, (2) the structure of collective bargaining, and (3) the social aspects of labor-management relations.

Mr. Silva

H-9 Merchandising

Products, trade marks, markets, distribution, broker, commission house, advertising, seasons, pricing, market analysis, business policies, price charts.

Text: Lecture Sheets

Professor Giblin

H-10A Modern Language

(French). Consists of the same matter as H-10B. Deals with scientific French instead of scientific German.

Professor Fenaux

H-10B Modern Language

(German). A basic course in the German Language for scientific purposes. Elementary grammar giving a facility in reading and translating easy works from German scientific literature.

Professor Fenaux

H-11 Sociology

The aim of this course is to aid the student in developing an understanding of the principles of sociology in order that he may live more intelligently and deal more effectively with the social problems of the world about him.

Topics to be covered in the course include, factors in the social life of man, the role of culture, heredity and personality, personality disorganization, group life, suggestibility, status, cooperation, competition, conflict, population distribution and growth, communities, social institutions and social change.

Special attention will be given to some of the current social problems.

Text: "Sociology" — Ogburn & Nimkoff

Mr. Sullivan

DEPARTMENT OF ENGINEERING DIVISION OF MATHEMATICS AND PHYSICS

M-1A Algebra

Review of high school algebra through quadratic equations. Includes a further study of simultaneous quadratic equations.

Prerequisite: Intermediate Algebra

Text: College Algebra, by Rees and Sparks

Mr. Saltus, Mr. Sylvia, Mr. Tinkham

M-1B Algebra

Continuation of M-1A to include a study of complex numbers, higher degree equations, inequalities, logarithms, exponential functions, progressions, mathematical induction, binomial theorem and determinants.

Prerequisite: M-1A

Text: College Algebra, by Rees and Sparks

Mr. Saltus, Mr. Sylvia and Mr. Tinkham

M-2 Trigonometry

A study of the functions of the acute angle and the relations among the trigonometric functions. A thorough consideration is accorded the right triangle, the oblique triangle, and the important formulas relating to all triangles. Approximately ten hours is spent in studying the use and application of the slide rule.

Prerequisites: Plane Geometry, M-1A, 1B

Text: Trigonometry, by Kells, Kern and Bland

Instructors: *Mr. Saltus and Mr. Sylvia*

M-3 Analytical Geometry

A study of plane and solid analytical geometry, functions and graphs, linear functions, polynomial curves, transformation of co-ordinates, the circle, algebraic and trigonometric curves, parametric equations, polar equation planes and lines, surfaces and curves.

Prerequisites: M-1, M-2

Text: Analytic Geometry, by Love

Professor Foster, Mr. Sylvia, Mr. Saltus

M-4A Differential Calculus

A preliminary study is made of variables, functions and limits. Differentiation and the rules for differentiating ordinary algebraic, trigonometric, exponential, and logarithmic terms are introduced.

Prerequisites: M-1, 2, 3

Text: Calculus, by Love

Professor Foster, Mr. Saltus, Mr. Sylvia

M-4B Integral Calculus

A study of integration and the integrating of standard elementary forms. Considers the constant of integration, the definite integral, process of summation, reduction formulas and practical applications.

Prerequisites: M-1, 2, 3, 4A

Text: Calculus, by Love

Professor Foster, Mr. Saltus, Mr. Sylvia

P-1 Physics

A study of heat, heat quantities, heat transfer, expansion, temperature measurement, etc. A thorough study is made of the properties of solids, the gas laws, motion, forces, vector quantities and simple machines.

Prerequisites: M-1, 2, 3, 4A

Text: Physics, by Perkins

Mr. Saltus, Mr. Sylvia, Mr. Tinkham

P-2 Physics

Continuation of P-1 to include a study of electricity including sources and effects of electric currents, the simple series and parallel circuits, measuring instruments, etc. A study is made of the various phases of sound and light.

Prerequisites: M-1, 2, 3 and M-4A

Text: Physics, by Perkins

Mr. Saltus, Mr. Sylvia and Mr. Tinkham

DEPARTMENT OF TEXTILE ENGINEERING DIVISION OF COTTON YARN PREPARATION

TE-101 Pickers and Cards

Cotton yarn mill machinery. Lists of processes in cotton mills for different numbers of yarn. Proper sequence of processes.

Objects of blending cotton. Methods of mixing same.

Methods of blending and mixing the different types of synthetic fibers.

Bale breakers and opening and cleaning machinery. Picker rooms. Automatic feeders, construction, capacity and suitability for the purpose intended. Various styles of openers, their use and object. Connection of feeders to openers. The various types of cleaning trunks.

Calculations in connection with openers, breaker pickers, intermediate and finisher pickers, and single process pickers with blending reserve.

Construction of aprons, beaters, bars, screens, fans, lap heads, evener motions, measuring motions, etc. The setting and adjusting of the different parts of these machines.

The revolving top flat card. Its principal parts described, including feed, licker-in, cylinder, doffer, coiler, screens and flats. Different setting arrangements. Calculations in connection with all types of cotton cards.

Clothing, grinding, setting and stripping cards.

No prerequisite

Text: Lecture Sheets

Professor Holden and Staff

TE-102 Cards and Drawing Frames

Study of Cards continued.

Drawing frame roller drafting, setting and calculations. Method of arranging and constructing drawing, frames, its use and objects. Gearing, types of weighing and stop motions. Varieties of rolls.

Prerequisite: TE-101

Text: Lecture Sheets

Professor Holden and Staff

TE-103 Roving and Spinning Frames

Slubbers, first and second intermediates, inter-draft, long draft, roving frames and jack frames. The construction and use of these machines. Calculations in connection therewith. Changing, fixing and re-setting frames, etc.

The ring spinning frame, its construction and use. Its principal parts, as creels, rolls, rings, travelers, speeds, builder motions, calculations, etc.

Prerequisite: TE-102

Text: Lecture Sheets

Professor Holden and Staff

TE-104 Advanced Calculations and Costs

Figuring the number of doublings and amount of draft required from picker to spinning frames.

Calculations for organization of machinery required for different counts of yarn. Amount of production and cost of production of yarn.

Practice work consists of running work from picker to spinning frames.

Prerequisite: TE-103

Text: Lecture Sheets

Professor Holden

TE-105 Twisters

The object of twisting. Wet and Dry Twisting. The different methods of preparing yarns for twisting. The direction and amount of twist in different ply and cord threads. Size of rings and travelers for the different counts of yarn. Calculations for twist and production.

Prerequisite: TE-103

Text: Lecture Sheets

Professor Holden and Staff

TE-106 Combing

Sliver and Ribbon Lap machines. Construction of the different types of Combers. Methods of setting, adjusting and operation of these machines, and calculations in connection therewith.

Prerequisite: TE-102

Text: Lecture Sheets

Professor Holden and Staff

TE-107 Applied Research

Research as applied to one or more machines consists of running original work, in laying out the machines to be used for the different types of yarns, as regards speeds, weights, etc., from the raw stock to the finished yarn. Tests at the different processes. Methods of testing. Blending and running all kinds of natural and synthetic fibers.

Prerequisites: TE-101, TE-106

Professor Holden and Staff

TE-108 Cotton Classing

Different species of cotton plants. Cultivation of cotton. The different varieties of cotton and the classes of goods for which they are best adapted. Cotton picking, ginning and marketing. The selection of cotton for different classes of goods. Cotton grading and stapling.

No prerequisite.

Text: Lecture Sheets

Professor Holden and Staff

TE-109 Cotton Manufacture

Cotton Manufacture is the name assigned to a course of lectures given to the first year students in Textile Technology, the third year students in Chemistry and the first year students in Machine Design, so that they may become acquainted with the methods employed in the manufacture of cotton yarn and cloth. The various machines are thoroughly described and the methods of using them discussed in the lecture room. Because of the limited amount of time allowed for this subject, the students are not taught to operate the machines, but are given an opportunity to examine them at rest and later to observe them in operation.

No prerequisite

Text: Lecture Sheets

Professor Holden and Staff

DIVISION OF WEAVING

TE-201 Yarn Calculations

Methods to establish the Count, Weight, or Length in all the different types of fibers are given with examples. Equivalent yarn numbering systems. New Fiber systems. Suggested system for universal numbering of all yarns.

No prerequisite

Text: Lecture Sheets

Professor Beardsworth

TE-202 Warp Preparation

Spooling or winding — The various types of packaging explained on the machine with respect to cost and manner of usage in the next preparatory manufacturing step.

Warping — High speed warping from cones, and slow speed from spools is taught with the necessary instructions for production and cost figuring. Warping with the silk system.

Slashing — The need for sizing. Methods of sizing. Difference in requirements as to heat, kind of size, and methods of operation with the various kinds of fibers. Cotton methods. Rayon methods. Silk methods.

Prerequisite: TE-201

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-203 Plain Looms

The primary movements required in weaving. Elementary power loom construction. Shedding by cams. Plain cams. Twill and Satin cams. Side cams. Split time cams. Double set cams. Construction of cams for special conditions. Timing of cams and its effect on the cloth. Methods of calculations for gearing of different cam drives. Picking motions.

Bat-wing and cone motions in detail from a practical weaving basis.

Shuttles — Different kinds of shuttles. Woods and other materials used in their manufacture. Care and treatment of shuttles.

Protector motions.

Reeds — Calculations for reeds. Care of reeds.

Take-up motions — Various kinds, with the necessary calculations to insure the greatest range of use.

Filling stop motions of all types.

Temples — The various types and makes and their distinctive features. The operation and maintenance of plain cam looms. Starting of warps. Faults and remedies in weaving and loom fixing.

Discussions on general loom accessories.

Prerequisite: TE-201

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-204 Dobby and Box Looms

Looms with a much greater range of pattern than the cam loom. The dobbie shedding machine. Dobby construction, with the timings and settings necessary for correct operation. Single and Double Index. Chain pegging and reading. Box looms. Different kinds of drop box mechanisms. Practical settings, with the best operational methods for the different types. Multiplier motions as applied to box looms. Dobby box looms with special weave mechanisms for such weaves as handkerchiefs, terry and other toweling, curtains, etc.

Prerequisite: TE-203

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-205 Automatic Looms

Draper looms of numerous models. Maintenance, operation, and possibilities of the different models of Draper looms. Practical settings for the feeler and transfer

mechanisms. Warp stop motions. Various types of mechanical beam tension control.

Crompton and Knowles multiple box looms, with automatic selective filling transfer. All of the required settings for complete loom operation. Chain building and co-ordination for varied patterns. Stafford shuttle changing looms. All settings for the shuttle changing mechanisms explained in detail.

Student assembly and operation of all the above looms.

Prerequisites: TE-203, 204

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-206 Jacquards

The principle of construction of Jacquard machines. Single and double lift machines. Jacquard machines for special purposes. Principles of harness tying. Layover, Center tie, etc. Care and treatment of harness lines. Practical work in cutting cards and weaving the student's own designs. Double cylinder Jacquard construction and operation with a 4 x 1 automatic box loom and center filling motion.

Prerequisite: TE-203

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-207 Special Mechanisms and Costing

Dobby looms with leno mechanisms for the weaving of all pattern lenos. Requirements and methods for the weaving of lenos on Jacquard looms.

Analysis and application of direct and indirect weave room costs.

Weaving yarn requirements and the preparatory machinery necessary to produce it.

Weave room operation and management under different product, labor, and power conditions.

Room lay-outs best suited to different kinds of product.

Prerequisite: TE-205

Text: Lecture Sheets

Professor Beardsworth and Staff

TE-208 Rayon Processing

This course covers the various conditioning and preparatory processes applied to the rayon yarns which are necessary in the production of rayon fabrics. These processes include soaking, spooling, throwing, winding, warping and slashing of rayon yarns.

DIVISION OF DESIGNING AND CLOTH ANALYSIS

TE-301 Designing

Definitions of the words and terms used in designing and analysis. Characteristics of the various classes of fabrics. Design paper and its application to designing and analysis. Cloth structure, with a study of the various sources from which the patterns of fabrics are obtained. Twills. Wave effects. Diamonds. Sateens. Granites. Checkerboards. Rearranged twills. Figured twills.

Text: Lecture Sheets

Professor Giblin and Staff

TE-302 Designing

Designing for single fabrics continued, such as honeycombs. Mock and imitation lenos. Entwining twills. Spots weaves arranged in various orders. Cord weaves. Imitation welts. Elongated twills. Check effects. Corkscrew weaves. Four change system of designing. Damask weaves.

Prerequisite: TE-301

Text: Lecture Sheets

Professor Giblin and Staff

TE-303 Designing

Designing for more complicated fabrics, such as figure fabrics, using extra materials. Fabrics backed with extra material. Fabric having the face and back of different material or pattern. Double plain fabrics. Reversible fabrics. Embossed effects, such as Bedford cords, piques, Marseilles weaves.

Prerequisite: TE-302

Text: Lecture Sheets

Professor Beardsworth

TE-304 Designing

Designing for leno, pile and lappet fabrics, such as methods of obtaining leno patterns. Mechanical appliances for the production of lenos, yoke and jumper motions. Bottom douns. Top douns. Check lenos. Jacquard leno-effects. Weaving with wire douns. Weaving with the bead motion. Russian cords. Marquisettes. Full turn lenos.

Pile fabrics, such as velveteens, corduroys, velvets, plushes, carpets, terry toweling.

Prerequisite: TE-303

Text: Lecture Sheets

Professor Beardsworth

TE-305 Jacquard Designing

Design paper. How to figure the design paper necessary to reproduce any Jacquard pattern. Defects of Jacquard patterns and how to avoid them. Transferring designs to plain paper. Transferring sketches to design paper. Changing the sley of Jacquard fabrics. Method of casting out. Ground weaves. Rules for finding sley, pick, warp and filling. Foundations upon which Jacquard patterns are based.

Prerequisite: TE-304

Text: Lecture Sheets

Professor Giblin

TE-306 Jacquard Designing

Different methods of making designs. Sketching original designs by the different methods commonly used. Working out the sketches upon design paper. Cutting cards on the piano card-cutting machine. Card lacing. Weaving of at least one original design. Method of weaving Jacquard leno designs. Mechanisms required in weaving Jacquard lenos. Making Jacquard leno designs.

Harness tying. Various systems of tying Jacquard harnesses. Lay-over ties. Center ties. Compound ties.

Prerequisite: TE-305

Text: Lecture Sheets

Professor Giblin

TE-307 Color

Theory of colors. Complementary colors. Hue, value and chroma scales. Practical work in color scales.

Text: Lecture Sheets

Professor Giblin and Staff

TE-308 Color

Munsell system of coloring. Color harmony, color effects. Analyzing color effects. Practical work in making sequences and in producing colored designs.

Prerequisite: TE-307

Text: Lecture Sheets

Professor Giblin and Staff

TE-309 Analysis

Standard methods of representing harness and reed drafts. Harness drafts on design paper. Written harness drafts. Chain drafts. Layout plans. Finding weight of warp yarns, weight of filling yarns. Yards per pound of cloth.

Text: Lecture Sheets

Professor Giblin and Staff

TE-310 Analysis

Finding counts of warp and filling by various methods. Finding yards per pounds of cloth from a small sample by weighing. Making original designs and weaving them on the power loom. Reproduction of woven samples.

Prerequisite: TE-309

Text: Lecture Sheets

Professor Giblin and Staff

TE-311 Analysis

Analyzing more difficult samples. Methods of analysis on various rayon fabrics. Finding average counts. Percentage of each material. Production of loom. Price per yard for weaving. Weaving of more difficult original designs.

Prerequisite: TE-310

Text: Lecture Sheets

Professor Giblin and Staff

TE-312 Analysis

Analysis of leno fabrics, making both written drafts and harness drafts on design paper. Chain drafts. Weaving of original leno designs. Changing the construction of fabrics and preserving balance of structure.

Prerequisite: TE-311

Text: Lecture Sheets

Professor Giblin and Staff

TE-313 Analysis

Analysis of more difficult samples continued. Methods of analysis on various rayon fabrics. Finding average counts. Percentage of each material. Production of loom. Price per yard for weaving. Weaving of more difficult original designs.

Prerequisite: TE-312

Text: Lecture Sheets

Professor Giblin

TE-314 Analysis

Continuation of the work outlined in TE-313. Weaving of students' original Jacquard designs. Work on cost of manufacturing fabrics.

Prerequisite: TE-313

Text: Lecture Sheets

Professor Giblin

TE-315 Styling

Study of common fabrics. Application of cloth analysis to the requirements of a converter or of a commission house.

Methods of ascertaining counts of warp and filling; also sley and pick for new fabrics.

Determining use of colored yarns in striped and figured fabrics with relation to cost of dyed yarns and woven colored patterns.

This is a continuation of analysis. Changing the construction of fabrics. Making sketches for alteration of fabrics. Finding cost of fabrics.

Prerequisite: TE-314

Text: Lecture Sheets

Professor Giblin

TE-316 Fabric Classification

A study of the characteristics of a wide range of staple fabrics made of cotton, wool, rayon, silk, nylon, orlon, azlon, glass and other fibers. In this subject, the student is supplied with samples of the various materials together with the information pertaining to their characteristics such as construction, composition, weave, performance and uses. At the conclusion of the subject, the student has a notebook containing about 300 samples of staple cloths and the data applying to each sample.

Texts: "Staple Cotton Fabrics," by Hoye

"Rayon Technology"

Professor Giblin

TE-317 Hand Loom

The hand loom, its construction and use. Harness drafts as affecting the weave. Building harness chains. Practice on the hand loom in weaving fabrics from original and other designs, and putting into practice the designing lessons.

Prerequisites: TE-301 and 302

Professor Giblin and Staff

TE-318 Retailing

This subject is included in the girls' course to give the student, who desires to make use of her textile training in a career within the field of retailing, a knowledge of the principles of retailing. Buying and merchandising are stressed. A study of the data to use in composing labels for merchandise to conform with an informative selling program is made.

Text: "Principles of Retailing," by Anderson and Barker

Professor Giblin

TE-319 Freehand Drawing

This consists of a study of procedures used in the creation of original patterns in sketch form. Several types of exercises are carried out to make the student familiar with the use of the pencil in decorative designing for textiles. The principles of design and the forms of application are studied. The students produce several original sketches of print patterns, shirtings, dress patterns and others, both with and without the use of color.

Text: Lecture Sheets

Professor Giblin

TE-320 Introductory Survey of Textiles

An introductory course designed to familiarize the student with elementary and non-technical phases of the textile industry. A study of the definitions of the common terms in manufacturing and finishing the textile. Properties and characteristics of the common material and man made fibers. Flow-charts of the principal fibers, from raw stock to finished fabric.

Text: Lecture Sheets

Professor Giblin

DIVISION OF TEXTILE TESTING**TE-321 Physical Testing**

Moisture — Relative humidity, regain, moisture content determinations and their effect on textile materials from a weight and testing viewpoint.

Physical tests on spun yarns with special emphasis on various twist constructions, weight (number), tensile (skein and single end), grades (quality) and methods of determination, tensile (grab and strip), elongation, weight, bow and crimp.

Cotton Fiber Technology — Length arrays by the Suter-Webb sorter and the Fibrograph. Fiber tensile by the Pressley flat bundle method. Fineness and maturity.

Text: ASTM Standards on Textile Materials; Lecture Sheets.

Mr. Beck

TE-322 Fabric Testing

Analysis of fabrics for type, construction, yarn sizes, weight and identification of natural and synthetic fibers, with most work being done from small swatches of fabric. Twist and tensile tests on yarns with emphasis on synthetic filament yarns. Analysis of fiber blended fabrics for type and percent of material. Fabric tests for finishing materials, water repellency, shrinkage and abrasion.

Prerequisite: TE-321

Text: ASTM Standards on Textile Materials; Lecture Sheets

Mr. Beck

TE-323 Microscopy

A course of study in the use and manipulation of the microscope, elementary optics as applied to the microscope, illumination and accessory equipment and its uses.

Micrometry and measurement techniques and the calibration and use of the different types of ocular micrometers.

Specimen mounting and identification of all the various textile fibers. Cross sectioning by several methods with emphasis on the use of the fiber microtome.

Recording Data — Written records, drawing from observation and camera lucida. Photomicrographic apparatus and photomicrographic and dark room technique including adjustment of apparatus, lighting and photographing specimens.

Analysis of fiber blended fabrics for identification and percent of various fibers. Wool grading by the micron diameter method. Denier determination of cut staple synthetic fibers and other special uses of the microscope to the textile technologist.

Text: Textile and the Microscope — Schwarz

Mr. Beck

DIVISION OF KNITTING**TE-501 Elementary Knitting**

A study of the various types of winding machines used for cotton, wool and synthetic yarns preparatory to running on hosiery knitting machines.

Text: Lecture Sheets

Professor Cloutier

TE-502 Hosiery Manufacture (Preliminary Operation)

Lectures in manufacture of knitted fabric, care of yarn prior to knitting, care of looper, backseaming and sewing machine. The correct way of boarding, inspection, pairing, marking for identification, folding and boxing, and the care for quality and efficiency.

Text: Lecture Sheets

Professor Cloutier

TE-503 Circular Knit Hose

A study of circular hose and half hose, ribbers for tops, transfer half hose, full half hose, reverse wrap, and Links & Links half hose, the full hose, mock seam and plain.

Text: Lecture Sheets

Professor Cloutier

TE-504 Warp Knit

A study of the complete segment that comes in contact with the fabric such as needle, sinker and divider; care and upkeep for quality; definition of gauge for all machines.

Text: Lecture Sheets

Professor Cloutier

TE-505 Full Fashion

The study of knitted material to be applied to various styles of garments, fabric pattern layout and the cutting for garment trade.

Text: Lecture Sheets

Professor Cloutier

TE-506 Body Garments

A study of stitch pattern design, warp design, quality finishing, warping, tread-ing and timing in both classes of machines, spring beard and latch needle machines, including Cidega or creel knitting machine, its fabric designing and operations.

Text: Lecture Sheets

Professor Cloutier

TE-507 Circular Body Knitting

The study of single needle jersey and two needle rib knit, sweater and underwear, including Jacquard machine.

Text: Lecture Sheets

Professor Cloutier

TE-508 Needles and Segment Upkeep

A study of all operations after the hose is produced from machine, looping, back-seaming, inspecting for quality and packaging.

Text: Lecture Sheets

Professor Cloutier

TE-509 Hose Manufacturing II (Final Operation)

The study of full fashion hose in styling, cost finding, and construction of hose. The operation of machine and clinic for defects in machine and hose.

Text: Lecture Sheets

Professor Cloutier

TE-510 General Construction of Knit Machines

A special series of lectures for the students in the Machine Design course for parts identification and construction. Includes the steps of sub-assembling machines.

Text: Lecture Sheets and Manufacturers Literature

Professor Cloutier

NEW BEDFORD TEXTILE INSTITUTE

CALENDAR

Day Classes

1951

September 10, Monday, 8:30 A.M.
 September 24-28, Monday-Friday
 October 12, Friday
 November 12, Monday
 November 21, Wednesday, 12 M.
 November 26, Monday, 8:30 A.M.
 December 14, Friday, 3:40 P.M.

First semester begins
 Class elections
 Columbus Day — Holiday
 Armistice Day — Holiday
 Thanksgiving recess begins
 Thanksgiving recess ends
 Christmas recess begins

1952

January 1, Tuesday
 January 2, Wednesday, 8:30 A.M.
 January 14, Monday
 January 25, Friday
 January 28, Monday, 8:30 A.M.
 February 22, Friday
 March 14, Friday, 3:40 P.M.
 March 24, Monday, 8:30 P.M.
 April 11, Friday
 May 26-June 4, Monday-Wednesday
 June 6, Friday, 8 P.M.

New Year's Day — Holiday
 Christmas recess ends
 Mid-year examinations begin
 Mid-year examinations end
 Second semester begins
 Washington's Birthday—Holiday
 Spring recess begins
 Spring recess ends
 Good Friday — Holiday
 Final examinations
 Commencement exercises

Evening Classes

1951

September 24, Monday, 7:30 P.M.
 September 24, Monday, 7:30 P.M.
 October 12, Friday
 November 12, Monday
 November 22, 23, Thursday, Friday
 December 10-14, Monday-Friday
 December 14, Friday

Enrollment
 First term begins
 Columbus Day — Holiday
 Armistice Day — Holiday
 Thanksgiving recess
 Examinations
 First term ends

1952

January 1, Tuesday
 January 3, Thursday, 7:30 P.M.
 February 22, Friday
 March 10-14, Monday-Friday
 March 14, Friday

New Year's Day — Holiday
 Second term begins
 Washington's Birthday—Holiday
 Examinations
 Second term ends

Day Classes

1952

September 8, Monday, 8:30 A.M.
 September 22-26, Monday-Friday
 October 13, Monday
 November 11, Tuesday
 November 26, Wednesday, 12 M.
 December 1, Monday, 8:30 A.M.
 December 19, Friday, 3:40 P.M.

First semester begins
 Class elections
 Columbus Day — Holiday
 Armistice Day — Holiday
 Thanksgiving recess begins
 Thanksgiving recess ends
 Christmas recess begins

1953

January 5, Monday, 8:30 A.M.
 January 19, Monday
 January 30, Friday
 February 2, Monday, 8:30 A.M.
 February 23, Monday
 March 13, Friday, 3:40 P.M.
 March 23, Monday, 8:30 A.M.
 April 3, Friday
 April 20, Monday
 May 25-June 3, Monday-Wednesday
 June 5, Friday, 8 P.M.

Christmas recess ends
 Mid-year examinations begin
 Mid-year examinations end
 Second semester begins
 Washington's Birthday—Holiday
 Spring recess begins
 Spring recess ends
 Good Friday — Holiday
 Patriots' Day — Holiday
 Final examinations
 Commencement exercises

Evening Classes

1952

September 29, Monday, 7:30 P.M.
 September 29, Monday, 7:30 P.M.
 October 13, Monday
 November 11, Tuesday
 November 27, 28, Thursday, Friday
 December 15-19, Monday-Friday
 December 19, Friday

Enrollment
 First term begins
 Columbus Day — Holiday
 Armistice Day — Holiday
 Thanksgiving recess
 Examinations
 First term ends

1953

January 5, Monday, 7:30 P.M.
 February 23, Monday
 March 9-13, Monday-Friday
 March 13, Friday

Second term begins
 Washington's Birthday—Holiday
 Examinations
 Second term ends

